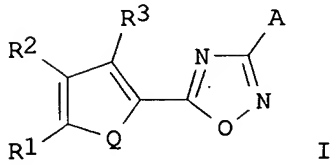
2/22/05

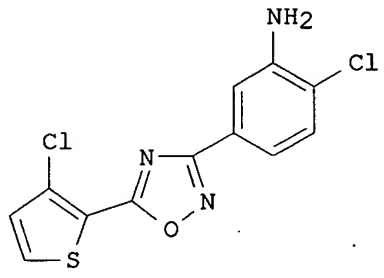
ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:565086 CAPLUS
DOCUMENT NUMBER: 141:123632
TITLE: Preparation of 3,5-Disubstituted-[1,2,4]-oxadiazoles and analogs as activators of caspases and inducers of apoptosis
INVENTOR(S): Cai, Sui Xiong; Zhang, Han-zhong; Kuemmerle, Jared D.; Zhang, Hong; Kemnitzer, William E.
PATENT ASSIGNEE(S): Cytovia, Inc., USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004058253	A1	20040715	WO 2003-US40308	20031218
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004127521	A1	20040701	US 2003-737865	20031218
PRIORITY APPLN. INFO.:			US 2002-433953P	P 20021218

OTHER SOURCE(S): MARPAT 141:123632
GI



I



II

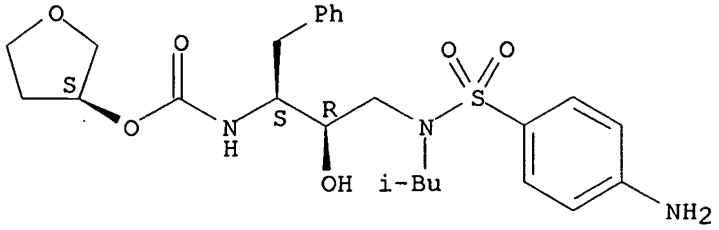
AB Title compds. I [R1-3 = H, halo, haloalkyl, aryl, etc.; Q = S, O, amino; A = heterocycle, carbocycle] are prepared For instance, 3-amino-4-chlorobenzamidoxime (preparation given) is reacted with 3-chlorothiophene-2-carbonyl chloride (pyridine, reflux, 50 min) to give II. II and other examples are potent caspase cascade activators and inducers of apoptosis in solid tumor cells, e.g., human breast cancer cell lines T-47D and ZR-75-1.

IT **161814-49-9**, Amprenavir **198904-31-3**, CGP-73547
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination pharmaceutical; preparation of 3,5-Disubstituted-[1,2,4]-oxadiazoles and analogs as activators of caspases and inducers of apoptosis)

RN 161814-49-9 CAPLUS
CN Carbamic acid, [(1S,2R)-3-[[(4-aminophenyl)sulfonyl](2-methylpropyl)amino]-

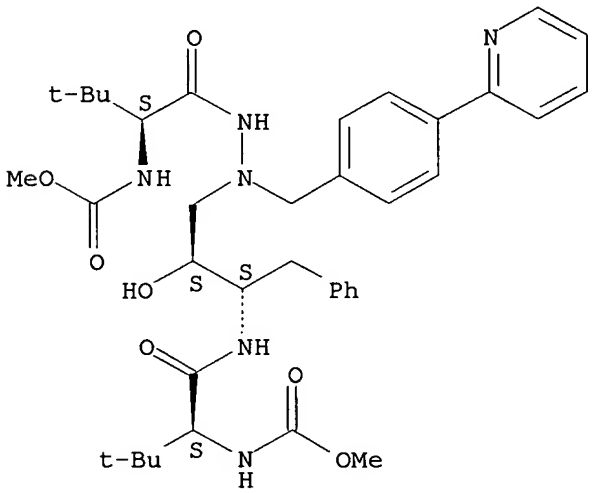
2-hydroxy-1-(phenylmethyl)propyl]-, (3S)-tetrahydro-3-furanyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 198904-31-3 CAPLUS
CN 2,5,6,10,13-Pentaazatetradecanedioic acid, 3,12-bis(1,1-dimethylethyl)-8-hydroxy-4,11-dioxo-9-(phenylmethyl)-6-[[4-(2-pyridinyl)phenyl]methyl]-, dimethyl ester, (3S,8S,9S,12S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L5 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:80349 CAPLUS
DOCUMENT NUMBER: 140:146136
TITLE: Preparation of chemokine receptor binding (benzimidazol-2-ylmethyl)(5,6,7,8-tetrahydroquinolin-8-yl)amines and related heterocyclic compounds with enhanced efficacy against AIDS and other disorders
INVENTOR(S): Bridger, Gary; Kaller, Al; Harwig, Curtis; Skerlj, Renato; Bogucki, David; Wilson, Trevor R.; Crawford, Jason; McEachern, Ernest J.; Atsma, Bem; Nan, Siqiao; Zhou, Yuanxi; Schols, Dominique; Smith, Christopher D.; Di Fluri, Maria R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S. Ser. No. 446,170.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004019058	A1	20040129	US 2003-457034	20030606
US 2003220341	A1	20031127	US 2002-329329	20021223
WO 2004106493	A2	20041209	WO 2004-US15977	20040521

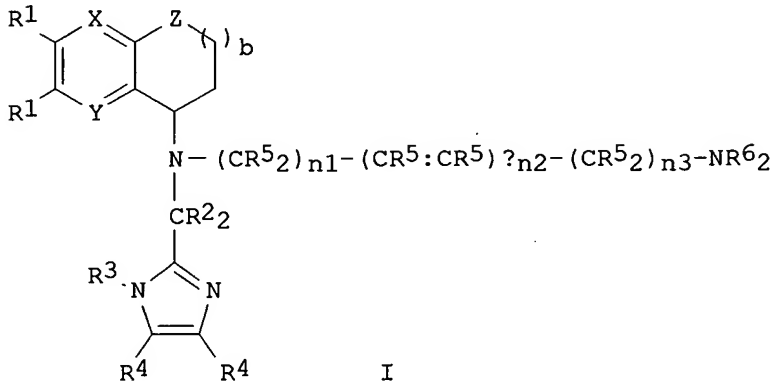
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
US 2001-342716P	P	20011221
US 2002-350822P	P	20020117
US 2002-329329	A2	20021223
US 2003-446170	A2	20030523
US 2003-457034	A	20030606

OTHER SOURCE(S): MARPAT 140:146136

GI



I

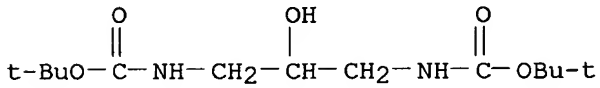
AB The invention relates to heterocyclic compds. (shown as I; e.g. (1H-benzimidazol-2-ylmethyl)(piperidin-3-ylmethyl)(5,6,7,8-tetrahydroquinolin-8-yl)amine trihydrobromide) consisting of a core N atom surrounded by three pendant groups, wherein two of the three pendant groups are preferably benzimidazolylmethyl and tetrahydroquinolyl, and the 3rd pendant group contains N and optionally contains addnl. rings. The compds. bind to chemokine receptors, including CXCR4 and CCR5, and demonstrate protective effects against infection of target cells by a human immunodeficiency virus (HIV). Many I exhibit IC50 values of 5-5.5 nM for inhibition of HIV-1 (NL4.3) replication in peripheral blood mononuclear cells and 5 nM-5 μM for inhibition of SDF-1α induced Ca flux in CCRF-CEM cells, a T-lymphoblastoid cell line that expresses CXCR4. It is also stated that the compds. I behave in a manner similar to 1,1'-[1,4-phenylene-bis(methylene)]-bis-1,4,8,11-tetraazacyclotetradecane (AMD3100) which showed to elevate progenitor cell levels (data given). Although the methods of preparation are not claimed, >170 example prepns. are included. For I: X and Y = N or CR1; Z is S, O, NR1 or CR12; each R1-R6 = H or a noninterfering substituent; n1 is 0-4; n2 is 0-1, wherein the a signifies C.tplbond.C may be substituted for CR5:CR5; n3 is 0-4; wherein

n1 + n2 + n3 = ≥ 2; b is 0-2; wherein the following combinations of R groups may be coupled to generate a ring, which ring may be (un)saturated: R2 + R2, one R2 + R3, R3 + one R4, R4 + R4, one R5 + another R5, one R5 + one R6, and R6 + R6; wherein the ring may not be aromatic when the participants in ring formation are two R5; and wherein when n2 is 1, neither n1 nor n3 can be 0.

IT **98642-15-0P**, [3-(tert-Butoxycarbonylamino)-2-hydroxypropyl]carbamic acid tert-butyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chemokine receptor binding benzimidazolylmethyl tetrahydroquinolinyl amines and related heterocyclic compds. with enhanced efficacy against AIDS and other disorders)

RN 98642-15-0 CAPLUS

CN Carbamic acid, (2-hydroxy-1,3-propanediyl)bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L5 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:532661 CAPLUS

DOCUMENT NUMBER: 139:101128

TITLE: Preparation of chemokine receptor binding (benzimidazol-2-ylmethyl)(5,6,7,8-tetrahydroquinolin-8-yl)amines and related heterocyclic compounds with enhanced efficacy against AIDS and other disorders

INVENTOR(S): Bridger, Gary J.; Skerlj, Renato T.; Kaller, Al; Harwig, Curtis; Bogucki, David; Wilson, Trevor; Crawford, Jason; McEachern, Ernest J.; Atsma, Bem; Nan, Siqiao; Zhou, Yuanxi; Schols, Dominique; Smith, Christopher Dennis; Di Fluri, Rosaria Maria

PATENT ASSIGNEE(S): Anormed Inc., Can.; et al.

SOURCE: PCT Int. Appl., 360 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

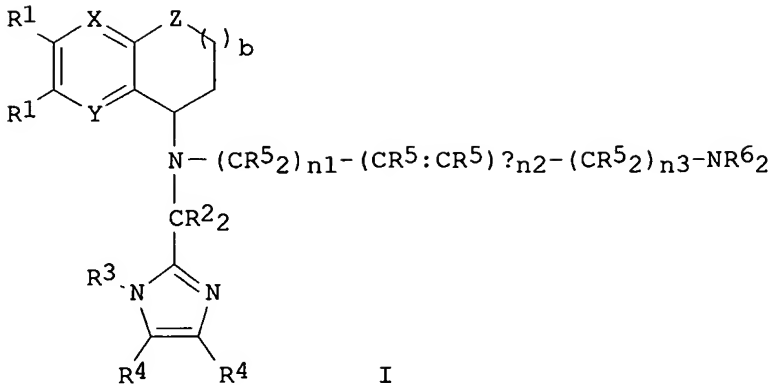
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055876	A1	20030710	WO 2002-US41407	20021223
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
BR 2002015050	A	20041013	BR 2002-15050	20021223
EP 1465889	A1	20041013	EP 2002-805977	20021223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.: US 2001-342716P P 20011221

US 2002-350822P P 20020117
WO 2002-US41407 W 20021223

OTHER SOURCE(S): MARPAT 139:101128

GI



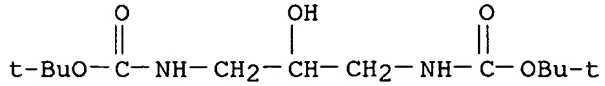
I

AB The invention relates to heterocyclic compds. (shown as I; e.g. (1H-benzimidazol-2-ylmethyl)(piperidin-3-ylmethyl)(5,6,7,8-tetrahydroquinolin-8-yl)amine trihydrobromide) consisting of a core N atom surrounded by three pendant groups, wherein two of the three pendant groups are preferably benzimidazolylmethyl and tetrahydroquinolyl, and the 3rd pendant group contains N and optionally contains addnl. rings. The compds. bind to chemokine receptors, including CXCR4 and CCR5, and demonstrate protective effects against infection of target cells by a human immunodeficiency virus (HIV). Many I exhibit IC50 values of 5-5.5 nM for inhibition of HIV-1 (NL4.3) replication in peripheral blood mononuclear cells and 5 nM-5 μM for inhibition of SDF-1α induced Ca flux in CCRF-CEM cells, a T-lymphoblastoid cell line that expresses CXCR4. Although the methods of preparation are not claimed, >170 example prepns. are included. For I: X and Y = N or CR1; Z is S, O, NR1 or CR12; each R1-R6 = H or a noninterfering substituent; n1 is 0-4; n2 is 0-1, wherein the a signifies C.tplbond.C may be substituted for CR5:CR5; n3 is 0-4; wherein n1 + n2 + n3 = ≥ 2; b is 0-2; wherein the following combinations of R groups may be coupled to generate a ring, which ring may be (un)saturated: R2 + R2, one R2 + R3, R3 + one R4, R4 + R4, one R5 + another R5, one R5 + one R6, and R6 + R6; wherein the ring may not be aromatic when the participants in ring formation are two R5; and wherein when n2 is 1, neither n1 nor n3 can be 0.

IT **98642-15-0P**, [3-(tert-Butoxycarbonylamino)-2-hydroxypropyl]carbamic acid tert-butyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chemokine receptor binding benzimidazolylmethyl tetrahydroquinolinyl amines and related heterocyclic compds. with enhanced efficacy against AIDS and other disorders)

RN 98642-15-0 CAPLUS

CN Carbamic acid, (2-hydroxy-1,3-propanediyl)bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

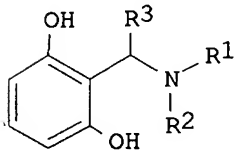


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:238180 CAPLUS
DOCUMENT NUMBER: 138:271380
TITLE: Preparation of 2-substituted resorcinol derivatives containing coloring agent as well as new resorcinol derivatives
PATENT ASSIGNEE(S): Wella AG, Germany
SOURCE: Ger. Gebrauchsmusterschrift, 48 pp.
CODEN: GGXXFR
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 20217957	U1	20030327	DE 2002-20217957	20021120
PRIORITY APPLN. INFO.:			DE 2002-20217957	20021120

OTHER SOURCE(S): MARPAT 138:271380
GI

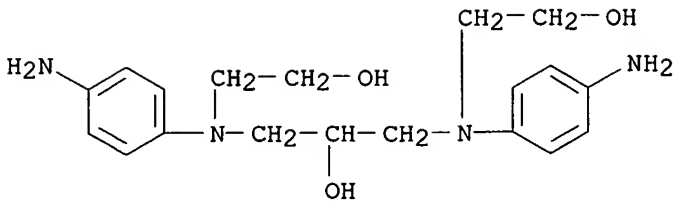


I

AB A means of the coloring keratin fibers based on a developer/generator substance coupling agent combination, is characterized by the fact that it contains at least one resorcinol derivative I [R1, R2 = H, C1-6-alkyl, C2-6-alkenyl, acetyl, C1-4-alkoxy, C1-4-hydroxyalkyl, C2-4-dihydroxyalkyl, C1-4-alkoxy-C1-4-alkyl, C1-4-hydroxyalkoxy-C1-4-alkyl, C1-4-aminoalkyl, C1-4-(dimethylamino)alkyl, C1-4-(acetylamino)alkyl, C1-4-[(tert-butoxycarbonyl)amino]alkyl, C1-4-cyanoalkyl, C1-4-carboxyalkyl, C1-4-(aminocarbonyl)alkyl, pyridyl Me, furfuryl, tetrahydrofurfuryl, methyltetrahydrofurfuryl, (un)substituted pyridyl, Ph, pyrazolyl, piperidinyl, morpholinyl, piperazinyl, pyrrolidinyl; R3 = H, C1-6-alkyl] or its physiol. compatible water-soluble salts. Thus, I [R1 = CH2CH2OMe, R2 = R3 = H] was prepared from resorcinol, via O-alkylation with ClCH2CH2OMe, Vilsmeier formylation, O-deprotection and reductive amination with MeOCH2CH2NH2. A hair dye was prepared containing I [R1 = CH2CH2OMe, R2 = R3 = H] and 2,5-diaminotoluene sulfate (developing agent) giving a medium blond color.

IT **128729-30-6**, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(developer substance for coloring agent containing resorcinol derivs.; preparation of 2-substituted resorcinol derivs. containing coloring agent as well as new resorcinol derivs.)

RN 128729-30-6 CAPLUS
CN 2-Propanol, 1,3-bis[(4-aminophenyl)(2-hydroxyethyl)amino]- (9CI) (CA INDEX NAME)

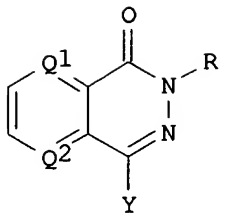


L5 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:154251 CAPLUS
DOCUMENT NUMBER: 138:205069
TITLE: Preparation of 2H-phthalazin-1-ones as poly(ADP-ribose)polymerase inhibitors for treatment of cancer
INVENTOR(S): Beaton, Graham; Moree, Wilna J.; Rueter, Jaimie K.; Dahl, Russell S.; McElligott, David L.; Goldman, Phyllis; Demaggio, Anthony J.; Christenson, Erik; Herendeen, Dan; Fowler, Kerry W.; Huang, Danwen; Bertino, Jaimie A.; Bourdon, Lisa H.; Fairfax, David J.; Jiang, Qin; Reisch, Helge A.; Song, Ren Hua; Zhichkin, Pavel E.
PATENT ASSIGNEE(S): Icos Corporation, USA
SOURCE: PCT Int. Appl., 229 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

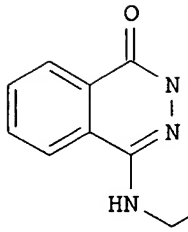
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015785	A1	20030227	WO 2002-US26271	20020815
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004087588	A1	20040506	US 2002-222749	20020815
EP 1423120	A1	20040602	EP 2002-768596	20020815
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.: US 2001-312540P P 20010815
WO 2002-US26271 W 20020815

OTHER SOURCE(S): MARPAT 138:205069
GI



I



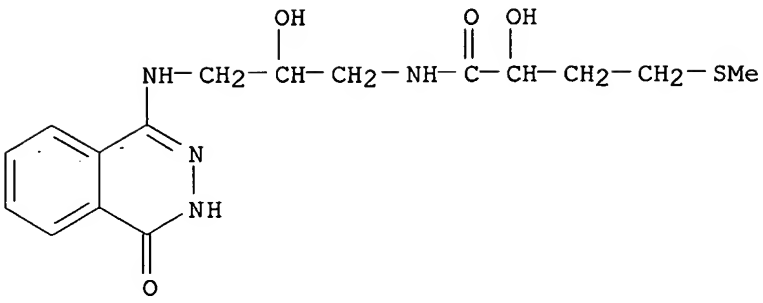
II

AB Title compds. and derivs. thereof I [wherein Q1 and Q2 = independently N or CRa; Ra = H, halo, NO2, or alkyl; R = H, alkyl, or N-protecting group; Y = NR1R2, R3C(=X1)Y1, (alkylene)x-NR11R12NR13[C(=X3)]c(NR14)d(R15)e[C(=X4)]fR16, or NR11R12N=CR20R21; R1, R14, and R20 = independently H or alkyl; R2 = arylcarbonyl, heteroalkyl, cyclo(alkyl), alkenyl, alkynyl, etc.; R3 = alkylene; X1, X3, and X4 = independently O or S; Y1 = NR4R5; R4 = H, (hetero)alkyl, or aralkyl; R5 = (un)substituted aralkyl, heteroalkyl, heterocyclyl, heteroaryl(alkyl), arylsulfonylamino, etc.; x = 0-1; R11 = H, alkyl, or (un)substituted heteroaralkyl; R12 = (cyclo)alkylene, heteroalkylene, aralkylene, or arylene; or NR11R12 = (un)substituted heterocyclyl; c = 0-2; d-f = independently 0-1; R13 = H, alkyl, arylcarbamoylalkylene, etc.; R15 = (hetero)alkylene or alkenylene; R16 = H, (un)substituted (hetero)aryl, (hetero)alkyl, cycloalkyl, aralkoxy, amino, arylsulfonylamino, etc.; R21 = alkyl, or substituted heteroaryl; and pharmaceutically acceptable salts, hydrates, solvates, or prodrugs thereof] were prepared as poly(ADP-ribose)polymerase (PARP) inhibitors (no data). For example, condensation of 1,3-propanediamine with phthalic anhydride in EtOH gave 3,4-dihydropyrimido[1,2-a]indol-10(2H)-one, which was dissolved in ethylene glycol and reacted with NH2NH2•H2O to afford II (51%). I are useful for radiosensitizing and chemosensitizing tumor cells for the treatment of cancer (no data).

IT **500026-71-1P**, 2-**Hydroxy**-N-[2-**hydroxy**-3-[(4-oxo-3,4-dihydrophthalazin-1-yl)amino]propyl]-4-methylsulfanylbutyramide monohydrochloride **500026-76-6P**, 3-[3-(2,3-Dihydrobenzofuran-5-yl)-[1,2,4]oxadiazol-5-yl]-N-[2-**hydroxy**-3-[(4-oxo-3,4-dihydrophthalazin-1-yl)amino]propyl]propionamide monohydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(PARP inhibitor; preparation of phthalazinone PARP inhibitors for treatment of cancer)

RN 500026-71-1 CAPLUS

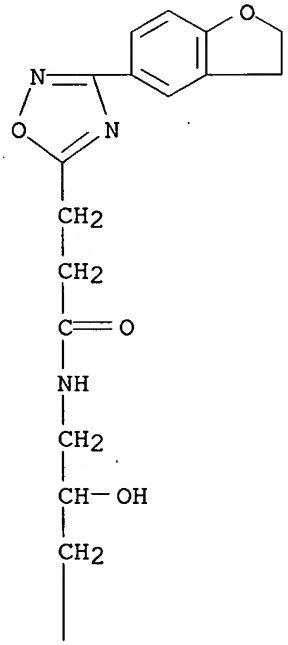
CN Butanamide, N-[3-[(3,4-dihydro-4-oxo-1-phthalazinyl)amino]-2-hydroxypropyl]-2-hydroxy-4-(methylthio)-, monohydrochloride (9CI) (CA INDEX NAME)

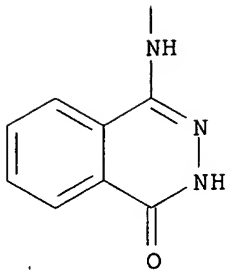


● HCl

RN 500026-76-6 CAPLUS

CN 1,2,4-Oxadiazole-5-propanamide, 3-(2,3-dihydro-5-benzofuranyl)-N-[3-[(3,4-dihydro-4-oxo-1-phthalazinyl)amino]-2-hydroxypropyl]-, monohydrochloride (9CI) (CA INDEX NAME)





● HCl

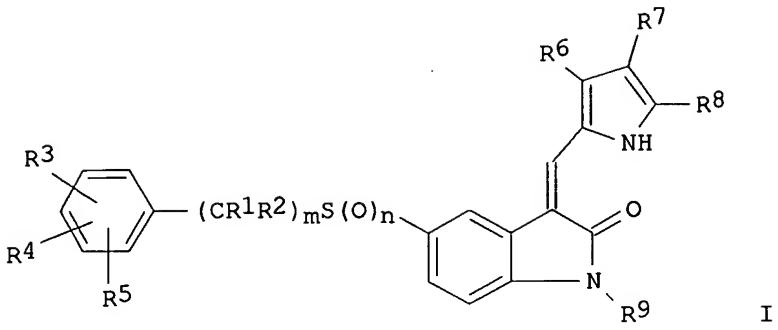
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:927188 CAPLUS
DOCUMENT NUMBER: 138:14005
TITLE: Preparation of 5-aralkylsulfonyl-3-(pyrrol-2-ylmethylidene)-2-indolinone derivatives as kinase inhibitors
INVENTOR(S): Cui, Jingrong; Ramphal, Yudhi; Liang, Congxin; Sun, Li; Wei, Chung Chen; Tang, Peng Cho
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 479 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096361	A2	20021205	WO 2002-US16841	20020530
WO 2002096361	A3	20030313		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003125370	A1	20030703	US 2002-157007	20020530
US 6599902	B2	20030729		

PRIORITY APPLN. INFO.: US 2001-294544P P 20010530
US 2001-328408P P 20011010

OTHER SOURCE(S): MARPAT 138:14005
GI



I

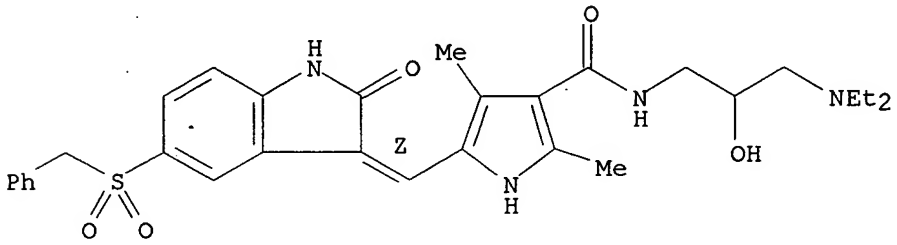
AB The present invention relates to certain 5-aralkylsulfonyl-3-(pyrrol-2-ylmethylidene)-2-indolinone derivs. (shown as I; see below for variable definitions; e.g. 2,4-dimethyl-5-(2-oxo-5-phenylmethanesulfonyl-1,2-dihydroindol-(3Z)-ylidenemethyl)-1H-pyrrole-3-carboxylic acid (2-diethylaminoethyl)amide) that inhibit kinases (no data), in particular met kinase. Pharmaceutical compns. comprising these compds., methods of treating diseases mediated by kinases using pharmaceutical compns. comprising these compds., and methods of preparing them are also disclosed. In I: n = 0-2; m = 1-3; R1 and R2 = H or alkyl; R3, R4, and R5 = H, halo, alkyl, cycloalkyl, haloalkyl, **hydroxy**, alkoxy, alkoxycarbonyl, haloalkoxy, cyano, carboxy, carboxyalkyl, nitro, aryl, aryloxy, heteroaryl, heteroaryloxy, -(alkylene)-CONR10R11, -CONR10R11, or - NR10R11 (R10 is H or alkyl, and R11 is aryl, heteroaryl, heterocycle, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, hydroxyalkyl, acetylalkyl, cyanoalkyl, carboxyalkyl, alkoxycarbonylalkyl, heteroaralkyl, aralkyl, or heterocyclylalkyl wherein the alkyl chain in aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, aralkyl, heteroaralkyl, or heterocyclylalkyl is optionally substituted with one or two **hydroxy**, or R10 and R11 together with the N atom to which they are attached combine to form saturated or unsatd. heterocycloamino). R6 is H, alkyl, cycloalkyl, hydroxyalkyl, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, carboxyalkyl, heterocyclylalkyl, aryl, heteroaryl, carboxy, alkoxycarbonyl, heterocyclylcarbonyl, aminoalkylcarbonyl, alkylaminoalkylcarbonyl, dialkylaminoalkylcarbonyl, -CONR10R11 or -(alkylene)-CONR10R11. R7 and R8 = H, alkyl, cycloalkyl, heterocyclylalkyl, -COR12, -(alkylene)-COR12 (R12 = alkoxy, **hydroxy**, or heterocycle, alkylamino, dialkylamino), -SO2R14, -CONR13R14; or -(alkylene)-CONR13R14 (R13 is H or alkyl, and R14 is aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, hydroxyalkyl, acetylalkyl, cyanoalkyl, carboxyalkyl, alkoxycarbonylalkyl, heteroaralkyl, or heterocyclylalkyl wherein the alkyl chain in aminoalkyl, heteroaralkyl, heteroaralkyl, or heterocyclylalkyl is optionally substituted with one or two **hydroxy** group(s), or when R13 and R14 are attached to a N atom R13 and R14 together with the N atom to which they are attached form saturated or unsatd. heterocycloamino). R6 and R7 or R7 and R8 can combine to form a saturated or unsatd. 5 to 8 membered ring; and R9 is: H or alkyl; -PO(OR15)2 where each R15 = H or alkyl; -COR16 where R16 is H or alkyl; or -CHR17NR18R19 where R17 is H or alkyl, and R18 and R19 = H or alkyl or R18 and R19 together with the N atom to which they are attached form heterocycloamino. Although the methods of preparation are not claimed, 375 example prepns. of I plus addnl. prepns. of intermediates are included.

IT **477574-59-7P**, 2,4-Dimethyl-5-(2-oxo-5-phenylmethanesulfonyl-1,2-dihydroindol-3-(Z)-ylidenemethyl)-1H-pyrrole-3-carboxylic acid (3-diethylamino-2-hydroxypropyl)amide **477576-52-6P**, 5-[5-(2,6-Dichlorophenylmethanesulfonyl)-2-oxo-1,2-dihydroindol-3-(Z)-ylidenemethyl]-2,4-dimethyl-1H-pyrrole-3-carboxylic acid (3-cyclopropylamino-2-hydroxypropyl)amide **477576-62-8P**, N-(3-Cyclopropylamino-2-hydroxypropyl)-2-[5-[5-(2,6-dichlorophenylmethanesulfonyl)-2-oxo-1,2-dihydroindol-3-(Z)-ylidenemethyl]-

2,4-dimethyl-1H-pyrrol-3-yl]**acetamide**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of aralkylsulfonyl- and pyrrolylmethylidene-substituted indolinones as kinase inhibitors useful against cancers and other disorders)

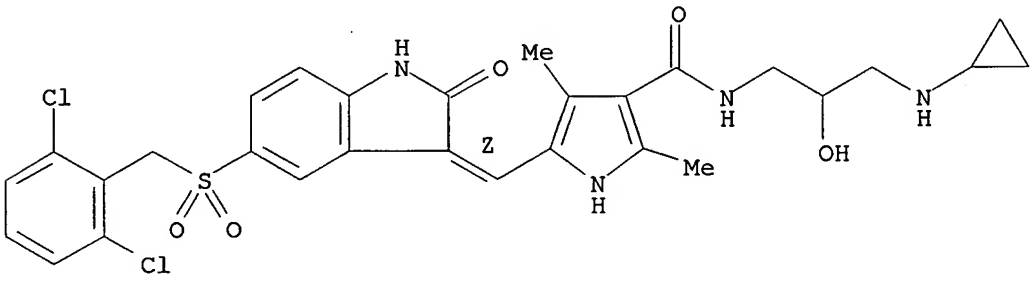
RN 477574-59-7 CAPLUS
CN 1H-Pyrrole-3-carboxamide, N-[3-(diethylamino)-2-hydroxypropyl]-5-[(Z)-[1,2-dihydro-2-oxo-5-[(phenylmethyl)sulfonyl]-3H-indol-3-ylidene]methyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



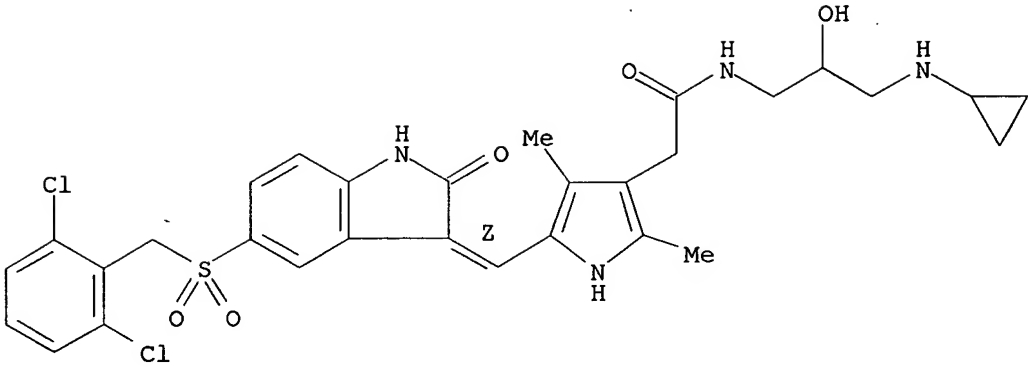
RN 477576-52-6 CAPLUS
CN 1H-Pyrrole-3-carboxamide, N-[3-(cyclopropylamino)-2-hydroxypropyl]-5-[(Z)-[5-[[(2,6-dichlorophenyl)methyl]sulfonyl]-1,2-dihydro-2-oxo-3H-indol-3-ylidene]methyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 477576-62-8 CAPLUS
CN 1H-Pyrrole-3-acetamide, N-[3-(cyclopropylamino)-2-hydroxypropyl]-5-[(Z)-[5-[[(2,6-dichlorophenyl)methyl]sulfonyl]-1,2-dihydro-2-oxo-3H-indol-3-ylidene]methyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L5 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:733860 CAPLUS
DOCUMENT NUMBER: 137:252674
TITLE: Synthesis of 1,3-diamino-4-(aminomethyl)-benzene derivates and their use in oxidative hair dyes
INVENTOR(S): Chassot, Laurent; Braun, Hans-Juergen
PATENT ASSIGNEE(S): Wella AG, Germany
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

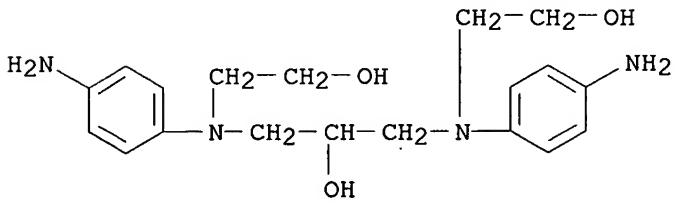
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10114084	A1	20020926	DE 2001-10114084	20010322
CA 2443289	AA	20021003	CA 2001-2443289	20011019
WO 2002076923	A1	20021003	WO 2001-EP12124	20011019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
BR 2001010957	A	20030408	BR 2001-10957	20011019
EP 1370514	A1	20031217	EP 2001-274020	20011019
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004518762	T2	20040624	JP 2002-576186	20011019
US 2003172471	A1	20030918	US 2002-276567	20021114
PRIORITY APPLN. INFO.:			DE 2001-10114084 A	20010322
			WO 2001-EP12124 W	20011019

OTHER SOURCE(S): MARPAT 137:252674

AB The invention concerns the synthesis of 1,3-diamino-4-(aminomethyl)-benzene derivates and their use as coupling agents in oxidative hair dyes. The hair prepns. further contain developers, other coupling agents and direct dyes. Thus 1,3-diamino-4-(methylaminomethyl)-benzene hydrochloride was synthesized and used as a 1.25 mmol coupler ingredient in a hair dye that contained 1.25 mmol 1,4-diamino benzene as developer. Further ingredients were (g); potassium oleate (8% aqueous solution) 1.0; ammonia (22% aqueous solution) 1.0; ethanol 1.0; ascorbic acid 0.3; water to 100.

IT **128729-30-6**, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-

propanol
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(synthesis of 1,3-diamino-4-(aminomethyl)-benzene derivates and use in oxidative hair dyes)
RN 128729-30-6 CAPLUS
CN 2-Propanol, 1,3-bis[(4-aminophenyl)(2-hydroxyethyl)amino]- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:695962 CAPLUS
DOCUMENT NUMBER: 137:232680
TITLE: Preparation of aryl and heteroaryl urea selective Chk1 inhibitors for use as radiosensitizers and chemosensitizers for treating diseases and conditions related to DNA damage or lesions in DNA replication
INVENTOR(S): Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam Wade; Cowen, Scott Douglas; Burgess, Laurence Edward
PATENT ASSIGNEE(S): Icos Corporation, USA
SOURCE: PCT Int. Appl., 236 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

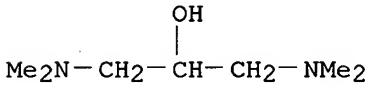
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002070494	A1	20020912	WO 2002-US6452		20020301
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2439709	AA	20020912	CA 2002-2439709		20020301
US 2003069284	A1	20030410	US 2002-87715		20020301
EP 1379510	A1	20040114	EP 2002-728396		20020301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2004523568	T2	20040805	JP 2002-569814		20020301
ZA 2003006721	A	20040503	ZA 2003-6721		20030828
NO 2003003858	A	20031010	NO 2003-3858		20030901
PRIORITY APPLN. INFO.:			US 2001-273124P	P	20010302
			WO 2002-US6452	W	20020301

OTHER SOURCE(S): MARPAT 137:232680
AB Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) useful in the treatment of diseases and conditions related to DNA damage

or lesions in DNA replication are disclosed. In 1, W' is a six-membered aromatic ring containing at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered aromatic or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = O, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of preparation are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl)urea and N-(4-chloro-2-methoxyphenyl)-N'-(2-pyrazinyl)urea enhanced the killing of various human cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradiation 2-3 fold.

IT **5966-51-8**, 1,3-Bis(dimethylamino)propan-2-ol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of aryl and heteroaryl urea selective Chk1 inhibitors for use as radiosensitizers and chemosensitizers for treating diseases and conditions related to DNA damage or lesions in DNA replication)

RN 5966-51-8 CAPLUS
CN 2-Propanol, 1,3-bis(dimethylamino)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

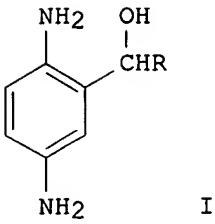


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

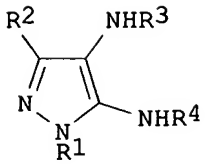
L5 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:107007 CAPLUS
DOCUMENT NUMBER: 136:156183
TITLE: Oxydative hair dyes containing derivatives of 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole
INVENTOR(S): Chassot, Laurent; Goettel, Otto; Braun, Hans-Juergen
PATENT ASSIGNEE(S): Wella A.-G., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10037158	A1	20020207	DE 2000-10037158	20000728
PRIORITY APPLN. INFO.:			DE 2000-10037158	20000728

OTHER SOURCE(S): MARPAT 136:156183
GI



I



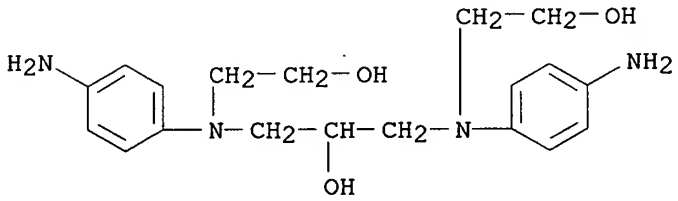
II

AB The invention concerns oxidative hair dyes that contain 2,5-diamino benzene derivs. (I), especially 1,4-Diamino-2-(1-hydroxyethyl)benzene, 1,4-Diamino-2-(1-hydroxpropyl)benzene and 4,5-diaminopyrazole derivs. (II). The dye compns. further contain couplers and direct dyes. Thus a composition contained (g): 1,4-Diamino-2-(1-hydroxpropyl)benzene 0.3; 4,5-diamino-1(2-hydroxyethyl)-pyrazole sulfate 0.3; 1,3-dihydroxybenzene 0.2; 1-naphthol 0.3; sodium oleate (8% aqueous solution) 10.0; ammonia (22% aqueous solution) 10.0; ethanol 10.0; ascorbic acid 0.3; water to 100.0. Directly before application, 30 g of the composition was mixed with 30 g 6% hydrogen peroxide solution; the product resulted red-brown hair color.

IT **128729-30-6**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(oxydative hair dyes containing derivs. of 2,5-Diamino-1-(1'-hydroxyalkyl)-benzene and 4,5-diaminopyrazole)

RN 128729-30-6 CAPLUS

CN 2-Propanol, 1,3-bis[(4-aminophenyl)(2-hydroxyethyl)amino]- (9CI) (CA INDEX NAME)



L5 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:729680 CAPLUS

DOCUMENT NUMBER: 135:288588

TITLE: (m-Diaminophenyl)acrylamide derivatives and hair coloring agents containing these compounds

PATENT ASSIGNEE(S): Wella AG, Germany

SOURCE: Ger. Gebrauchsmusterschrift, 48 pp.
CODEN: GGXXFR

DOCUMENT TYPE: Patent

LANGUAGE: German

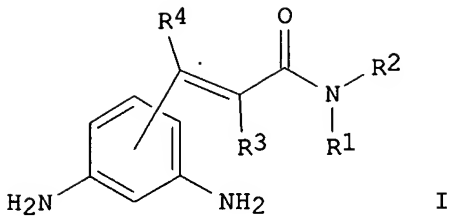
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 20111037	U1	20011004	DE 2001-20111037	20010704
PRIORITY APPLN. INFO.:			DE 2001-20111037	20010704

OTHER SOURCE(S): MARPAT 135:288588

GI



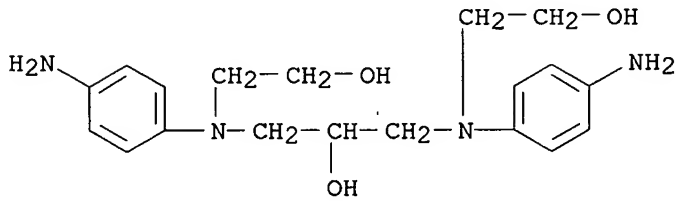
I

AB (m-Diaminophenyl)acrylamide derivs. I [R1, R2 = H, C1-2 alkoxy, C1-6 alkyl, unsatd. C3-6 alkyl, C2-4 hydroxyalkyl, C3-4 dihydroxyalkyl, C2-4 aminoalkyl, a C2-4 dimethylaminoalkyl, C2-4 acetylaminoalkyl, a C2-4 methoxyalkyl, C2-4 ethoxyalkyl, C1-4 cyanoalkyl, C1-4 carboxyalkyl, C2-4 aminocarbonylalkyl, pyridylmethyl, furfuryl, hydrogenated furfuryl, substituted pyridyl, (un)substituted Et, (un)substituted Ph, substituted aminopyrazolyl; or R1 and R2 together with the N atom form a ring; R3, R4 = H, C1-4 alkyl; preferably, R3 = R4 = H, or R1, R2 and R4 = H, R2 = aminophenyl, hydroxyphenyl] or their physiol. compatible, water-soluble salts, useful in oxidative hair dyes based on a developer substance-coupling substance combination in one suitable cosmetic carrier, are claimed. Preferred compds. I are 3-(2,4-diaminophenyl)-1-morpholinopropenone, 3-(2,4-diaminophenyl)-N-(4-hydroxyphenyl)acrylamide, 3-(3,5-diaminophenyl)-N-(4-hydroxyphenyl)acrylamide, N-(3-aminophenyl)-3-(3,5-diaminophenyl)acrylamide and N-(4-aminophenyl)-3-(3,5-diaminophenyl)acrylamide, or their physiol. acceptable salts (prepns. given). In examples given, compds. I are formulated with one or more known developer substances and one or more known addnl. coupling substances to give various shades of color when applied to hair; e.g., 0.10 g 3-(2,4-diaminophenyl)-1-morpholinopropenone HCl salt, 0.30 g 1,4-diaminobenzene, 0.05 g 1,3-diamino-4-(2-hydroxyethyl)aminoanisole sulfate, and 0.05 g 3-aminophenol (formulation given) afforded blond hair.

IT **128729-30-6**, 1,3-Bis[(4-aminophenyl)(2-hydroxyethyl)amino]-2-propanol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(developer substance component in oxidative hair dye based on developer-coupling substance combination)

RN 128729-30-6 CAPLUS

CN 2-Propanol, 1,3-bis[(4-aminophenyl)(2-hydroxyethyl)amino]- (9CI) (CA INDEX NAME)



L5 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:297450 CAPLUS

DOCUMENT NUMBER: 134:315863

TITLE: Composition for oxidative dyeing of keratinous fibers comprising amino-alkylphenol, para-phenylenediamine, and meta-aminophenol derivatives

INVENTOR(S): Pastore, Florent; Lagrange, Alain

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

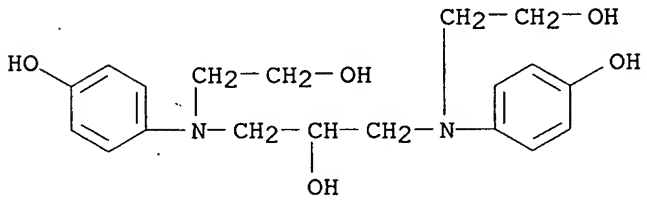
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1093792	A1	20010425	EP 2000-402782	20001009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2799958	A1	20010427	FR 1999-13144	19991021
FR 2799958	B1	20011221		
US 6530960	B1	20030311	US 2000-692589	20001020
JP 2001151649	A2	20010605	JP 2000-323394	20001023

PRIORITY APPLN. INFO.: FR 1999-13144 A 19991021
OTHER SOURCE(S): MARPAT 134:315863

AB Oxidative hair dye compns. comprise amino-alkylphenol, para-phenylenediamine, and meta-aminophenol derivs. A hair dye composition contained para-phenylenediamine 3x10-3 mole, N-(2-**hydroxy**-4-methylphenyl)**acetamide** 1.5x10-3 mole, 2,4-diamino-1(β-hydroxyethyloxy)benzene dihydrochloride 1.5x10-3, excipients and water q.s. 100 g. At the time of use equal amount of the composition is mixed with 20 volume hydrogen peroxide and applied on the hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a dark blue color.

IT **335157-55-6**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(composition for oxidative dyeing of keratinous fibers comprising amino-alkylphenol, para-phenylenediamine, and meta-aminophenol derivs.)

RN 335157-55-6 CAPLUS
CN Phenol, 4,4'-[(2-hydroxy-1,3-propanediyl)bis[(2-hydroxyethyl)imino]]bis- (9CI) (CA INDEX NAME)



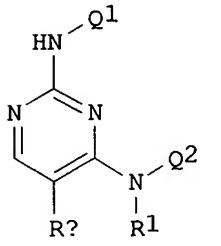
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:457043 CAPLUS
DOCUMENT NUMBER: 133:89537
TITLE: Preparation of 2,4-pyrimidinediamine derivatives as anticancer agents
INVENTOR(S): Bradbury, Robert Hugh; Breault, Gloria Anne; Jewsbury, Philip John; Pease, Janet Elizabeth
PATENT ASSIGNEE(S): Astrazeneca UK Limited, UK
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

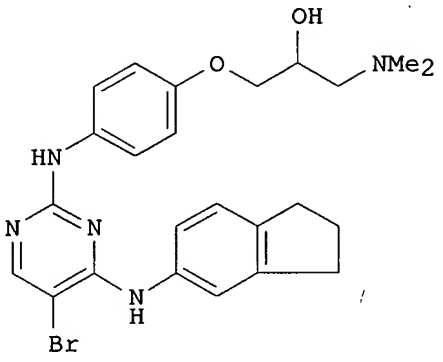
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000039101	A1	20000706	WO 1999-GB4325		19991220
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2352896	AA	20000706	CA 1999-2352896		19991220
EP 1140860	A1	20011010	EP 1999-962375		19991220
EP 1140860	B1	20040922			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
BR 9916590	A	20011023	BR 1999-16590		19991220
JP 2002533446	T2	20021008	JP 2000-591012		19991220
AU 763091	B2	20030710	AU 2000-18743		19991220
NZ 512118	A	20030829	NZ 1999-512118		19991220
AT 277020	E	20041015	AT 1999-962375		19991220
ZA 2001004413	A	20020829	ZA 2001-4413		20010529
NO 2001003038	A	20010822	NO 2001-3038		20010619
US 6593326	B1	20030715	US 2001-868602		20010823
PRIORITY APPLN. INFO.:			GB 1998-28511	A	19981224
			WO 1999-GB4325	W	19991220

OTHER SOURCE(S): MARPAT 133:89537
GI



I



II

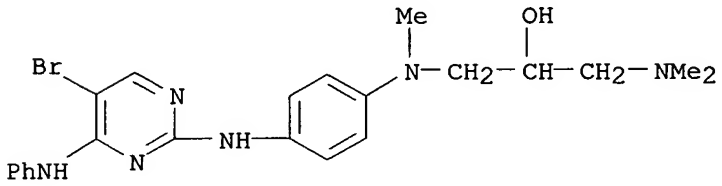
AB The present invention relates to the title compds. (I) [wherein R1 = H, (un)substituted alkyl, alkenyl, or alkynyl, benzyl, 2-phenylethyl, phthalimidoalkyl, or cycloalkylalkyl; Rx = halo, OH, NO2, NH2, CN, SH, CO2H, SO2NH2, NHCHO, ureido, etc.; Q1 and Q2 = independently (un)substituted aryl, 5- or 6-membered monocycle, or 9- or 10-membered bicyclic heterocycle], processes for their manufacture, and pharmaceutical compns. containing them. For example, addition of 4-[2-**hydroxy**-3-(N,N-dimethylamino)propoxy]aniline•HCl in MeOH to 5-bromo-2-chloro-4-(indan-5-ylamino)pyrimidine in BuOH (prepns. given) and heating to 100°C for 18 h gave II (42%). I inhibited the effects of cylin-dependent serine/threonine kinases (CDKs), showing selectivity for CDK2 (no data), CDK4 (IC50 ranging from 0.02 μM to 0.07 μM), and CDK6 (no data). In a tyrosine kinase activity assay using Sf21 cells

transfected with plaque-pure FAK recombinant virus, I also inhibited focal adhesion kinase 3 (FAK3) with IC50 ranging from 0.032 μM to 0.07 μM. Typical IC50 values for I when tested for inhibition of cell growth in an Sulforhodamine B (SRB) assay were in the range of 1 mM to 1 nM. Thus, I possess anti-cancer properties, including anti-cell-migration, antiproliferation and/or apoptotic properties. Such properties are expected to be of value in the treatment of disease states associated with aberrant cell cycles and cell proliferation such as cancers (solid tumors and leukemias), fibroproliferative and differentiative disorders, psoriasis, rheumatoid arthritis, Kaposi's sarcoma, hemangioma, acute and chronic nephropathies, atheroma, atherosclerosis, arterial restenosis, autoimmune diseases, acute and chronic inflammation, bone diseases, and ocular diseases with retinal vessel proliferation.

IT **280581-35-3P**, 4-Anilino-5-bromo-2-(4-{N-[2-**hydroxy**-3-(N,N-dimethylamino)propyl]-N-methylamino}anilino)pyrimidine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2,4-pyrimidinediamine anticancer agents by coupling halopyrimidines with anilines and optional derivatization)

RN 280581-35-3 CAPLUS

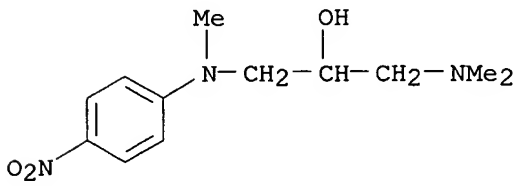
CN 2-Propanol, 1-[[4-[[5-bromo-4-(phenylamino)-2-pyrimidinyl]amino]phenyl]methylamino]-3-(dimethylamino)- (9CI) (CA INDEX NAME)



IT **260045-58-7P**, 4-{N-[2-**Hydroxy**-3-(N,N-dimethylamino)propyl]-N-methylamino}nitrobenzene **260045-59-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2,4-pyrimidinediamine anticancer agents by coupling halopyrimidines with anilines and optional derivatization)

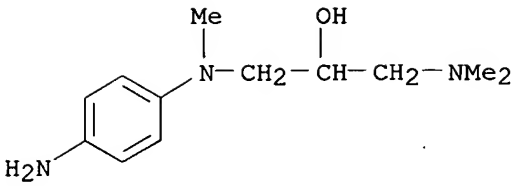
RN 260045-58-7 CAPLUS

CN 2-Propanol, 1-(dimethylamino)-3-[methyl(4-nitrophenyl)amino]- (9CI) (CA INDEX NAME)



RN 260045-59-8 CAPLUS

CN 2-Propanol, 1-[(4-aminophenyl)methylamino]-3-(dimethylamino)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1964:16680 CAPLUS
DOCUMENT NUMBER: 60:16680
ORIGINAL REFERENCE NO.: 60:2925a-h,2926a-d
TITLE: Cyclization reactions of butadiene dioxide with hydrazines to new derivatives of pyrazolidine and piperidazine
AUTHOR(S): Meyer, H. R.; Gabler, R.
CORPORATE SOURCE: Dewey Almy A.-G., Zuerich, Switz.
SOURCE: Helvetica Chimica Acta (1963), 46(7), 2685-97
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 60:16680
GI For diagram(s), see printed CA Issue.
AB dl- and meso-Butadiene dioxide (I) with various hydrazines yielded 1:1 adducts having either a pyrazolidine or piperidazine structure; with N,N' disubstituted hydrazines, pyrazolidine derivs. were obtained in 70-80% yields, whereas N2H4 with dl-I yielded about 20% trans-4,5-dihydroxypiperidazine (II) and a small amount of trans-2,3-trans-7,8-tetrahydroxy-10-azaquinolizidine (III). The structures of representatives of the 5- and 6-membered ring systems were proved by their conversion into open-chain **diamines**, which were identified by independent syntheses or by conversion to known compds. The assignments of the other 1:1 adducts to the pyrazolidine or the piperidazine series, resp., were made on the basis of the n.m.r. spectra. (PhNH)2 (14.9 g.) in 6.9 g. dl-I heated 20 hrs. at 100°, dissolved in 80 cc. C6H6, and diluted with 40 cc. warm petr. ether gave 16.5 g. trans-isomer (IV) of V (R = Ph), m. 112°(C6H6 and petr. ether or CCl4). IV in EtOH acidified with dilute HCl gave an intense blue color which changed gradually to green. IV (1.00 g.) in 10 cc. Ac2O and 10 cc. C5H5N heated 15 min. on the water bath, cooled, diluted with a little H2O, and evaporated gave 1.02 g. diacetate, highly viscous, yellow oil, b0.02 169°. meso-I (2.15 g.) and 4.6 g. (PhNH)2 yielded similarly 4.9 g. (crude) cis isomer of IV, m. 111° (C6H6 or CCl4). dl-I (4.3 g.) added dropwise with stirring at 20-30° to 23.4 g. 14.1% aqueous (MeNH)2, kept some time, concentrated, and distilled twice gave 6.7 g. trans-isomer (VI) of V (R = Me), collected in 3 fractions at 105°/0.02 mm., n20D 1.5037 (2.0 g.), n20D 1.5039 (3.8 g.), and n20D 1.5044 (0.8 g.). VI purified through the picrate, m. 141° (iso-PrOH), showed n20D 1.5039 and crystallized upon long storage. VI diacetate b10 136°, n20D 1.4589; picrate m. 158° (Me2CO-EtOH). meso-I (4.3 g.) gave similarly, with 23.4 g. 14.1% aqueous (MeNH)2, 5.8 g. cis isomer (VII) of VI, b0.1 109°, n20D 1.5041; picrate m. 136° (iso-PrOH). VII diacetate b12 139-41°; picrate m. 115° (Me2CO-EtOH). dl-I (8.6 g.) added dropwise with stirring at 80-100° to 10.3 g. 86% pure (EtNH)2 yielded 13.3 g. viscous, yellowish oily V (R = Et) b0.05 107°, n20D 1.4903, m. 51°. dl-I (51.7 g.) added dropwise with stirring below 30° to 57.7 g. N2H4 during about 1 hr. and evaporated, and the residue dissolved in 200 cc. warm EtOH and kept overnight yielded 15.6 g. II, m. 233°

(decomposition) (aqueous EtOH and sublimed in vacuo at 180°); the filtrate from II distilled gave 13.1 g. fraction, b0.5 155-60° [picrate, m. 220° (decomposition) (H2O)]. II (1.4 g.) acetylated in 50 cc. 1:1 Ac2O-C5H5N yielded 3.05 g. tetra-Ac derivative, m. 136° (C6H6-petr. ether), dl-I (25.8 g.) added dropwise with stirring at 25-30° to 9.6 g. N2H4 as a 30% aqueous solution, cooled, and filtered gave 2.0 g. III.H2O, m. 303° (decomposition) (1:1 EtOH-H2O). II (11.8 g.) in 40 cc. H2O treated during 15 min. with cooling with 12.9 g. dl-I, kept overnight, and filtered yielded 4.7 g. III.H2O, m. 304° (decomposition) (H2O), acetylated to tetra-Ac derivative of III, m. 264° (CHCl3-EtOH). meso-I (25.8 g.) added dropwise during 0.5 hr. at 25-30° with stirring to 28.8 g. N2H4 as a 20% aqueous solution and evaporated, and the viscous residue dissolved in 100 cc. warm absolute EtOH, kept 48 hrs., and filtered gave 15.8 g. 1:1 adduct (VIII), m. 131-2°, consisting of at least 2 substances; by extraction with boiling EtOH a product, C4H10N2O2, m. 146° (90-5% EtOH), was isolated from the mixture; it decomposed within 3 months to a brown liquid. II (5.9 g.), 11.5 g. HCO2H, and 8.7 g. 38% aqueous CH2O heated carefully on the water bath and then 2 hrs. at 100°, treated with 10 cc. concentrated HCl, and evaporated, and the residue in a little H2O passed through strongly basic Amberlite IR-410 gave 5.4 g. 1,2-di-Me derivative (IX) of II, b0.1 112-17°, m. 110° (Me2CO); picrate m. 125° (iso-PrOH); IX diacetate b9 139-40°, n20D 1.4642 [picrate, m. 202° (decomposition) (Me2CO-EtOH)]. dl-I (8.6 g.) added dropwise during about 0.5 hr. at 25-30° to 575 g. 29.5% NH4OH, kept overnight, and evaporated, and the residue distilled yielded 9.4 g. [H2NCH2CH(OH)]2 (X), b0.05 146°, m. 106°, purified via X.2HCl, m. 185° [X.2HCl dipicrate m. 211° (decomposition) (H2O)]. Tetra-Ac (XI) derivative of X m. 179° (AcOEt). Ac2O (10.7 g.) added dropwise with stirring and cooling to 6.0 g. X, heated 10 min. on the water bath, dissolved in 100 cc. EtOH, concentrated, and cooled yielded 7.7 g. di-Ac derivative (XII) of X, m. 184° (decomposition) (EtOH). II (2.36 g.) in 30 cc. H2O hydrogenated 1 hr. at 100°/170 atmospheric over 2.5 cc. Raney Ni yielded 2.2 g. crude X. meso-I (4.3 g.) and 115 g. 29.5% NH4OH gave similarly 3.0 g. meso-[H2NCH2CH(OH)]2, m. 189° (MeOH) (sublimed in vacuo at about 180°). XII (168.3 mg.) treated with 100 cc. 0.4% aqueous KIO4 was oxidized in less than 5 min. XII (408 mg.) and 632 mg. KMnO4 in 20 cc. H2O heated 5 min. on the water bath, filtered, passed through weakly acidic Amberlite-IRC-50, and evaporated, and the residue (320 mg.) dissolved in 20 cc. warm EtOH, filtered, concentrated, and cooled gave 55 mg. AcNHCH2CO2H, m. 207.5° (EtOH). DL-I (4.3 g.) added dropwise with stirring and cooling at 25-30° during 0.5 hr. to 159 g. 39% aqueous MeNH2 and evaporated after 0.5 hr., and the residue sublimed in vacuo at 190° yielded 6.4 g. [MeNHCH2CH(OH)]2 (XIII), m. 144° (MeOH); XIII.2HCl m. 214° (aqueous EtOH). IX (1.46 g.) in 30 cc. H2O hydrogenated 2 hrs. at 100°/150 atmospheric over 1.46 cc. Raney Ni gave 0.59 g. XIII, m. 144°. meso-I (1.72 g.) added dropwise with stirring at 25-30° during 15 min. to 79.5 g. 39% aqueous MeNH2 yielded 2.55 g. meso-isomer (XIV) of XIII, m. 168° (EtOH); XIV.2HCl, m. 223° (aqueous EtOH). VI (7.3 g.) in 30 cc. H2O hydrogenated 5 hrs. at 100°/145 atmospheric over 7.3 g. Raney Ni gave 4.9 g. erythro-MeNHCH2CH(OH)CH(NHMe)CH2OH (XV), m. 110° (MeOH and sublimed in vacuo at 106°); dipicrate m. 165° (H2O). ClCH2CH(OH)CHClCH2OH (1.59 g.), m. 63° (Et2O), in 79.5 g. 39% aqueous MeNH2 kept 2.5 hrs. at room temperature and evaporated, the residue dissolved in a little H2O, passed through 50 cc. strongly basic Dowex 1, and eluted with H2O to neutrality, and the eluate concentrated and distilled yielded 1.20 g. oily

distillate, which dissolved in 8 cc. C6H6 and kept 4 hrs. at room temperature yielded 0.20 g. XV, m. 108-9° (MePh); the mother liquor evaporated, and the oily residue in 20 cc. refluxing EtOH treated with picric acid in portions to pH about 4 and cooled yielded 2.71 g. (crude) dipicrate of erythro-MeNHCH2CH(NHMe)CH(OH)CH2OH (XVI), m. 183° (H2O). erythro-ClCH2CHClCH(OH)CH2OH (1.59 g.), m. 69° (C6H6), in 77.8 g. 40% aqueous MeNH2 kept 2.5 days at room temperature and evaporated, the residue passed through 50 cc. strongly basic Dowex 1 and distilled, and the distillate dissolved in 7 cc. hot C6H6 and cooled to 25° deposited 0.68 g. crude XV, needles, m. 104°; the mother liquor evaporated, the oily residue dissolved in 13 cc. EtOH, and the boiling alc. solution adjusted with picric acid to pH about 4 yielded 1.10 g. crude picrate of XVI, m. 183° (H2O). VIII (3.0 g.) in 30 cc. H2O hydrogenated 5 hrs. at 100°/158 atmospheric over 3.0 g. Raney Ni, and the oily product treated in EtOH with picric acid yielded 9.7 g. picrate of the threo-isomer (XVII) of XV, m. 171-2° (H2O); the picrate passed through Dowex I gave XVII, b0.1 108°, n20D 1.4903.

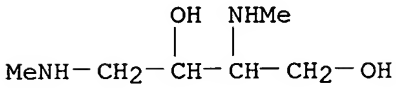
IT **94264-64-9**, 1,3-Butanediol, 2,4-bis(methylamino)-, dipicrate (preparation of)

RN 94264-64-9 CAPLUS

CN 1,3-Butanediol, 2,4-bis(methylamino)-, dipicrate (7CI) (CA INDEX NAME)

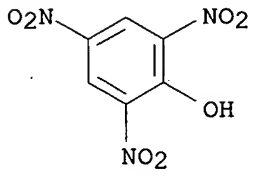
CM 1

CRN 89280-67-1
CMF C6 H16 N2 O2



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L5 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1947:19501 CAPLUS
DOCUMENT NUMBER: 41:19501
ORIGINAL REFERENCE NO.: 41:3902d-i,3903a-i,3904a-i,3905a-i,3906a-i,3907a-i,3908a-i,3909a-i,3910a-i,3911a-i,3912a-h
TITLE: New growth-regulating compounds. I. Summary of growth-inhibitory activities of some organic compounds as determined by three tests
AUTHOR(S): Thompson, H. E.; Swanson, Carl P.; Norman, A. G.
CORPORATE SOURCE: Camp Detrick, Frederick, MD
SOURCE: Botanical Gazette (Chicago) (1946), 107, 476-507
CODEN: BOGAA5; ISSN: 0006-8071

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. Newman, et al. C.A. 41, 3774i. Growth-regulating substances were prepared and subjected to 3 tests. In each a common reference material, (2,4-dichlorophenoxy)acetic acid (I), was employed and the results of any test were expressed as a percentage of the inhibition produced concurrently by I. The primary test, Test A (Corn Germination Test), involved the determination of inhibition of elongation of the primary root of germinating corn. Corn grains were germinated at 27° in Petri dishes containing 20 mL. of an aqueous solution of the compound to be tested at a concentration of 10 p.p.m. After 4 days of growth the length of the primary root of each plant was measured. Inhibition of growth was determined by subtracting the average length of the primary roots of the treated seeds from that of the control seeds, expressed in percentage. In Test B (Kidney-Bean Single-Droplet Water Test) kidney beans were placed in pots containing 1 lb. soil. After 7-10 days each plant was treated with 0.02 mL. of an aqueous solution containing 200 p.p.m. (4 γ) of the compound to be tested and 0.5% of Carbowax 1500. Treatment was applied to the upper surface of one of the primary leaves at a point along the midrib approx. one-eighth in. from the point of attachment of the blade and petiole. On the 10th day after treatment the fresh weight of that portion of each plant above the second node was determined Controls untreated and also treated with I were included in each test. Test C (Kidney-Bean Single-Droplet Oil Test) was essentially the same as Test B but 0.01 mL. of solution was applied containing 5γ in oil of the compound to be tested. Tri-Bu phosphate, at a concentration of 0.2%, was used as a co-solvent for compds. not directly soluble or miscible with oil. The introduction of I could be accomplished only in this way. Close numerical agreement was not necessarily expected between the 3 tests. The degree of inhibition produced by I in Tests B and C at different times of the year was not wholly identical and was affected by rate of growth. Test A was the most reproducible and formed the primary basis for detection of inhibitory activity and was reliable in separating those compds. that possess a high inhibitory activity for most broad-leaved plants from those with little or no activity at the same concentration Satisfactory agreement was found between Tests A and B with discrepancies in the direction of a lower activity by Test B. Variation between replications was greatest in Test C but the results were satisfactory in separating active inhibitors from those with low activity. Compds. showing high activity are promising for use as herbicides. The compds. tested have been classified into groups according to activity and the results under 3 tests reported. The following, as Group I, are compds. possessing 80% or more of the activity of I in Test A: (2-bromo-4-chlorophenoxy)acetic acid; Bu (2,4,5-trichlorophenoxy) acetate; (2-chloro-4-bromophenoxy)acetic acid; NH4 4-chlorocinnamate; α(4-chlorophenoxy) **acetamide**; (3-chlorophenoxy)acetic acid; 4-isomer; α-(2,4-dichlorophenoxy) **acetamide**; 2-(2,4-dichlorophenoxyacetamido)-1-butanol; Na 4-(2,4-dichlorophenoxyacetamido)-2,5-dichlorobenzenesulfonate; 2-(2,4-dichlorophenoxyacetamido)-2-ethyl-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-2-(hydroxymethyl)-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-2-methyl-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2,4-dichlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid; (3,4-dichlorophenoxy)acetic acid; 2,5-isomer; (2,4-dichlorophenoxy)acetic anhydride; α-(2,4-dichlorophenoxy)-4-sulfoacetanilide; (2,4-dichlorophenoxy)acetohydroxamic acid; (2,4-dichlorophenoxy) acetyl chloride; (2,4-dichlorophenoxyacetyl)guanidine; N-(2,4-dichlorophenoxyacetyl)urea; α-(2,4-dichlorophenoxy)butyric acid; 2-diethylaminoethyl (2,4-dichlorophenoxy)acetate; 2-diethylaminoethyl

(2,4,5-trichlorophenoxy)acetate; 2,2-dimethyl-1,3-dioxolan-4-ylmethyl (2-methyl-4-chlorophenoxy)acetate; 1,4-bis(2,4,5-trichlorophenoxyacetamido)benzene; 1,3-isomer; Et (2,4-dichlorophenoxy)-acetate; Et (2-methyl-4-chlorophenoxy) acetate; Et 2-(2-methyl-4-chlorophenoxy) heptanoate; 2-hydroxyethyl (2,4-dichlorophenoxy)acetate; (2-iodo-4-chlorophenoxy)acetic acid; (2-methyl-4-bromophenoxy)acetic acid; (2-methyl-4-chlorophenoxy)**acetamide**; N-methyl-α-(4-chlorophenoxy)**acetamide**; 4-(2-methyl-4-chlorophenoxyacetamido)benzenesulfonic acid; 2-(2-methyl-4-chlorophenoxyacetamido)-6,8-naphthalenedisulfonic acid; 2-(2-methyl-4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2-methyl-4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 7-(2-methyl-4-chlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid; (2-methyl-4-chlorophenoxy)acetic acid; (2-methyl-6-chlorophenoxy)acetic acid; (2-methyl4-chlorophenoxy)acetic anhydride; (2-methyl-4-chlorophenoxy)acetyl chloride; (2-methyl-4-fluorophenoxy)acetic acid; N-methyl-α-(2,4,5-trichlorophenoxy) **acetamide**; 2-nitro-2-methylpropyl (2,4-dichlorophenoxy)acetate; 2-nitro-2-methylpropyl (2-methyl-4-chlorophenoxy)acetate; Ph chloroacetate; Ph (2-methyl-4-chlorophenoxy)acetate; iso-Pr (2-methyl-4-chlorophenoxy)acetate; 2-(2,4,5-trichlorophenoxyacetamido)-2-(hydroxymethyl)-1,3-propanediol; α-(2,4,5-trichlorophenoxy)-N,N-bis(2-hydroxyethyl)**acetamide**; (2,4,5-trichlorophenoxy)acetic piperidide; α-(2,4,5-trichlorophenoxy)-3-chloroacetanilide; α-(2,4,5-trichlorophenoxy)-2,4-dimethylacetanilide; α-(2,4,5-trichlorophenoxy)-4-ethoxyacetanilide; α-(2,4,5-trichlorophenoxy)-4-methylacetanilide; α-(2,4,5-trichlorophenoxy)-2,4,6-trichloroacetanilide; [3-(trifluoromethyl)phenoxy] acetic acid; N-[tris(hydroxymethyl)methyl]-N-{2-**hydroxy**-3-[tris(hydroxymethyl)methylamino]-propyl}-α-(2,4-dichlorophenoxy) **acetamide**-HCl. The following, as Group II, are compds. possessing 50-79% of the activity of I in Test A: 2-aminoethanol bis-[(4-chlorophenoxy)acetate];(4-bromophenoxy)acetic acid; O-(2-carboxymethoxy-3-methyl-5-bromobenzoyl)glycolic acid; O-(2-carboxymethoxy-3-methyl-5-nitrobenzoyl)-glycolic acid; decyl dihydrogen orthophosphate; (2-chloro-4-tert-butylphenoxy)acetic acid; (2-chloro-4-iodophenoxy)acetic acid; 1-chloronaphthylacetic acid (mixture), ammonium salt; 2-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 4-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(4-chlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid; α-(4-chlorophenoxy)-N,N-bis(2-hydroxyethyl) **acetamide**; (4-chlorophenoxy)acetyl chloride; 2-(4-chlorophenoxyacetamido)-2-(hydroxymethyl)-1,3-propanediol; γ-(4-chlorophenoxy)-butyric acid; S-(4-chlorophenyl)thioglycolic acid; 2-butenyl (4-chlorophenoxy)acetate; (2,4-dibromophenoxy)acetic acid; α,β-dibromo-γ-phenylpropionyl chloride; 3,5-dichloro-2-bromobenzoic acid; (2,4-dichloro-5-bromophenoxy)acetic acid; (2,4-dichlorophenoxy)acetic piperidide; 4-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid; (2,4-dichlorophenoxy)acetonitrile; N'-(2,4-dichlorophenoxyacetyl)betaine hydrazide hydrochloride; α-(2,4-dichlorophenoxy)-N,N-diethylacetamide; α-(2,4-dichlorophenoxy-N-methylacetamide; NH4 γ-(2,4-dichlorophenoxy)butyrate; 2,4-dichlorophenylglycine; S-(2,5-dichlorophenyl)thioglycolyl chloride; 2,2-dimethyl-1,3-dioxolan-4-ylmethyl (4-chlorophenoxy)-acetate; β-(2,4-dimethylphenoxy)propionic acid; 3,5-dimethylpyrazole; Et 3-**hydroxy**-2-naphthoate; Et (2-methyl-4,6-dichlorophenoxy) acetate; 2-**hydroxy**-3-methyl-5-bromobenzoic acid; 2-**hydroxy**-3-methyl-5-iodobenzoic acid; 2-hydroxyethyl (4-chlorophenoxy)-acetate; N-2-hydroxyethyl-α-(2,4-dichlorophenoxy)**acetamide**; N-2-hydroxyethyl-α-(2-methyl-4-chlorophenoxy)-**acetamide**; 2-hydroxyethyl (2-methyl-4-chlorophenoxy)-acetate; 2-**hydroxy**-3-methylbenzoic

acid; 2-**hydroxy**-5-nitrobenzoic acid; (2-methyl-4-bromo-6-carboxyphenoxy)acetic acid; α-(3-methyl-4-chlorophenoxy) **acetamide**; Me (4-chlorophenoxy)acetate; (2-methyl-5-chlorophenoxy)acetic acid; (3-methyl-4-chlorophenoxy)-acetic acid; α-(2-methyl-4-chlorophenoxy)-N,N-bis(2-hydroxyethyl) **acetamide**; (3-methyl-4-chlorophenoxy)-acetyl chloride; Me (2,4-dibromophenoxy)acetate; Me (2,4-dimethylphenoxy) acetate; (2-methylphenoxy)acetyl chloride; Ph (4-chlorophenoxy)acetate; Ph (2,4-dichlorophenoxy)acetate; α-(2-propyl-4-chlorophenoxy) **acetamide**; α-(2,4,5-trichlorophenoxy) acetanilide; (2,4,5-trichlorophenoxy)acetonitrile; N-(2,4,5-trichlorophenoxyacetyl) bis[tris(hydroxymethyl) methylaminomethyl] carbinol hydrochloride. The following, as Group III, are compds. possessing 30-49% of the activity of I in Test A: 4-aminoazobenzene; 2-(amylamino)ethyl diphenylacetate-HCl; (2-amyl-4-chlorophenoxy)acetic acid; isoamyl (2,4-dimethylphenoxy)acetate; 2-bromoethyl (4-chlorophenoxy)acetate; (2-bromophenyl)sulfamic acid; butylamine mercuric chloride; Bu (3-methylphenoxy)acetate; cacotheline; 1-(4-carboxyphenyl-3-(3-chlorophenyl)urea; chloroacetamide; 4-chlorobenzoyl chloride; (4-chlorophenoxy)acetonitrile; 1-(4-chlorophenoxy)-2,3-epoxypropane; (4-chlorophenyl)acetic acid; N-(4-chlorophenyl)glycine; S-(4-chlorophenyl)thioglycolyl chloride; N-butyl-S-(4-chlorophenyl)thioglycolamide; [2-(cyanomethyl)-4-chlorophenoxy] acetic acid; NH4 N,N-(cyclopentamethylene)dithiocarbamate; 3,5-dibromo-2-aminobenzoic acid; 2,5-dichloroaniline mercuric chloride salt; (2,4-dichloro-5-aminophenoxy)-acetic acid; 2,4-dichlorocinnamic acid; α-(2,4-dichloro-6-methylphenoxy) **acetamide**; (2,4-dichloro-5-nitrophenoxy)acetic acid; (2,4-dichlorophenoxy)-N,N-bis(2-hydroxyethyl)**acetamide**; S-(2,5-dichlorophenyl)thioglycolic acid; 1,1-bis(1-**hydroxy**-2,2,2-trichloroethyl)urea; 3,4-dimethylphenol; (2,4-dimethylphenoxy)acetic acid; 3,4-isomer; (2,4-dimethylphenoxy)acetyl chloride; S-(2,4-dinitrophenyl)thioglycolic acid; N,N-bis [tris(hydroxymethyl)methyl]ethylenediamine-di-HCl; Et [2-(chloromethyl)-4-chlorophenoxy]acetate; (2-ethyl-4-chlorophenoxy)acetic acid; Et S-(4-chlorophenyl)thioglycolate; 2-**hydroxy**-3-carboxy-5-chlorotoluene; 4-**hydroxy**-3,5-dibromobenzoic acid; 2-hydroxyethyl 2,4-dichlorophenyl ether; N4-(iodoacetyl)sulfanilamide; 2-methyl-2-butylaminopropyl 4-(hexyloxy)benzoate-HCl; (2-methyl-4-chloro-6-carboxyphenoxy)acetic acid; Me(2-chlorophenoxy)acetate; 1-(2-methyl-4-chlorophenoxy)-2,3-epoxypropane; Me (2,4-dichlorophenoxy)acetate; (2-methylphenoxy)acetic acid; 4-nitrobenzoyl chloride; octyl dihydrogen orthophosphate; 2-isopropylaminoethyl 2-butoxybenzoate-HCl; Pr (2-methyl-4-chlorophenoxy)acetate; iso-Pr phenylcarbamate; Ba 3-pyridinesulfonate; sulfamerazine; 2,3,5-tribromobenzoic acid; 2,3,5-trichlorobenzoic acid; (2,2,2-trichloro-1-hydroxyethyl)urea; (2,4,6-trichlorophenoxy)acetic acid; (2,4,5-trichlorophenoxy)-2-nitroacetanilide; 2,4,6-trichlorophenyl phenylcarbamate; S-(2,4,5-trichlorophenyl)thioglycolamide; 1-[3-(trifluoromethyl)phenoxy]-2,3-epoxypropane; NH4 2,3,5-triiodobenzoate; N-[tris(hydroxymethyl)methyl]-N-{2-**hydroxy**-3-[tris(hydroxymethyl)methylamino]propyl}-α-(4-chlorophenoxy) **acetamide**-HCl. The following, as Group IV-A, are compds. showing less than 29% of the activity of I in Test A and 50% or more of the activity of I in either Test B or Test C: α-amino-β-(2,4-dichlorophenoxy)propionamide; α-amino-β-(3-nitro-4-hydroxyphenyl)propionic acid nitrate salt; aminotetrazole; aniline; (benzylsulfonyl)acetic acid; 5-bromo-2-nitrobenzoic acid; 2-bromo-3-nitrobenzoic acid; NH4 2-bromo-3-nitrobenzoate; β-bromopropionic acid; 2-butylaminoethyl 4-butoxybenzoate-HCl; 2-isobutylaminoethyl 4-butoxybenzoate-HCl; 2-butylaminoethyl 4-ethoxybenzoate-HCl; 2-butylaminoethyl 4-methoxybenzoate-HCl; camphor oxime; N4-(carbo-2-chloroethoxy)sulfanilamide; (2-carbomethoxy-4-chlorophenoxy)acetic acid; (2-carboxy-4-chlorophenoxy)acetic acid;

(2-carboxy-6-methylphenoxy)acetic acid; (2-carboxyphenoxy)acetic acid; [2-(carboxymethoxy)-3,5-dichlorobenzoyl]glycolic acid; chloroacetic acid; 2-chloroaniline; 3-chloroaniline; 4-chloroaniline; 4-chlorobenzyl mercaptan; 4-chlorobenzenesulfonyl chloride; 4-chlorobenzylisothiourea-HCl; 4-chloromandelic acid; (2-chloro-4-methylphenoxy)acetic acid; 2-chloro-3-nitrobenzoic acid; 2-chloro-5-nitrobenzoic acid; (2-chlorophenoxy)acetic acid; [2-(2-chlorophenyl)phenoxy]acetic acid; 4-chlorothiophenol; diazoaminobenzene; 2,4-dibromophenol; dichloroacetic acid; 2,4-dichloroaniline; 2,5-dichloroaniline; (2,4-dichlorobenzylsulfonyl)acetic acid; 2,4-dichlorobenzoic acid; 2,4-dichlorobenzylisothiourea-HCl; (2,4-dichloro-6-carboxyphenoxy)acetic acid; (2,6-dichloro-4-nitrophenoxy)acetic acid; 2,4-dichlorophenyl phenylcarbamate; (2,5-dichlorophenyl)sulfamic acid; 2,4-dihydroxypyrimidine; 2,4-dimethylphenol; (2,4-dinitrophenyl)acetic acid; N,N'-bis[tris(hydroxymethyl)methyl] hexamethylenediamine-di-HCl; 3-ethoxy-2-naphthoic acid; 2-ethylaminobutyl 4-ethoxybenzoate-HCl; Et carbamate; Et β-methyl-β-(4-chlorophenyl)glycidate; 3-ethyl-4-methylpyridine; Et (2-propyl-4-chlorophenoxy)acetate; (2-fluorophenoxy)acetic acid; 2-**hydroxy**-3-bromo-5-chlorobenzoic acid; 2-**hydroxy**-3-methyl-5-nitrobenzoic acid; N-(2-**hydroxy**-3-chloropropyl)-p-toluidine; 2-**hydroxy**-3,5-dinitrobenzoic acid; 4-iodobenzoic acid; 2-methoxyphenol; 4-methoxyphenol; 2-methyl-2-amylaminopropyl diphenylacetate-HCl; 2-methyl-5-chlorophenol; 2-methyl-6-chlorophenol; (2-methyl-4-chlorophenoxy)fumaric acid; Me 3-chlorophenylcarbamate; 2-methyl-4,6-dichlorophenol; 2-methyl-2-hexylaminopropyl 4-ethoxybenzoate-HCl; Me (2-methyl-6-chlorophenoxy)acetate; (4-methylphenoxy)acetic acid; Me phenylthiocarbamate; S-(2-methylphenyl)thioglycolic acid; 4-methyl-4-(trichloromethyl)-2,5-cyclohexadien-1-one O-carboxymethyloxime; 2-nitrobutyl phenylcarbamate; 1-phenyl-3-methyl-5-pyrazole; phthalic acid; α-pinene; 2-isopropylaminoethyl 4-butoxybenzoate-HCl; (2-propyl-4-chlorophenoxy)acetic acid; iso-Pr (2,4-dimethylphenoxy)acetate; iso-Pr (2-methyl-6-chlorophenoxy)acetate; 3-propyl-2-naphthoic acid; iso-Pr (2-propyl-4-chlorophenoxyacetate); trichloroacetamide; trichloroacetic acid; trichloroacetyl chloride; 2,4,5-trichlorobenzenesulfonamide; 3,4,5-trihydroxybenzoic acid; N-[tris(hydroxymethyl)methyl]-2,3-dibromopropylamine-HBr; salicylic acid. The following, as Group IV-B, are compds. insufficiently soluble in water for Test A to be performed but exhibiting 50% or more of the activity of I in either Test B or Test C: allyl (4-chlorophenoxy)acetate; allyl (2,4-dichlorophenoxy)acetate; 2-aminonaphthoic acid; amyl (2,4-dichlorophenoxy)acetate; isoamyl (2,4-dichlorophenoxy)acetate; amyl 1-naphthalenecarbamate; bis-(4-chlorophenyl)(trichloromethyl)methane; 1,1'-(bis-2-naphthol)phenylmethane; 2-bromo-3,5-dichlorobenzamide; 2-bromo-3,5-dichlorobenzanilide; 2,2'-dibromo-3,5-dichlorobenzanilide; 2,3'-dibromo-3,5-dichlorobenzanilide; 2,4'-dibromo-3,5-dichlorobenzanilide; 2-bromo-3,3',5-trichlorobenzanilide; 2-bromo-2',3,4',5-tetrachlorobenzanilide; 2-bromo-3,5-dichloro-m-benzotoluidide; 2-bromo-3,5-dichlorobenzoyl chloride; 2-bromoethyl (2,4-dibromophenoxy) acetate; 2-bromoethyl (2,4-dichlorophenoxy) acetate; α-(4-bromophenoxy)**acetamide**; 1-(3-bromophenyl)-3-(2-chlorophenyl)urea; 1-(3-bromophenyl)-3-(3-chlorophenyl)urea; Bu (2,4-dichlorophenoxy)acetate; iso-Bu (2,4-dichlorophenoxy)acetate; 1-carbethoxy-3-(3-chlorophenyl)urea; 2-chloroethyl (4-chlorophenoxy)acetate; 2-chloroethyl (2,4-dibromophenoxy)acetate; 2-chloroethyl (2,4-dichlorophenoxy)acetate; 2-chloroethyl (2-methyl-4-chlorophenoxy)acetate; 2-chloroethyl 1-naphthalenecarbamate; 2-chloroethyl phenylcarbamate; α-(4-chlorophenoxy)-p-acetanisidide; α-(4-chlorophenoxy)-2-bromoacetanilide; α-(4-chlorophenoxy)-3-bromoacetanilide; α-(4-chlorophenoxy)-4-bromoacetanilide; α-(4-chlorophenoxy)-2-chloroacetanilide; α-(4-chlorophenoxy)-3-chloroacetanilide;

α-(4-chlorophenoxy)-2,4-dimethylacetanilide; α-(4-chlorophenoxy)-4-ethoxyacetanilide; 1-(4-chlorophenoxyacetyl)-2-phenylhydrazine; α-(4-chlorophenoxy)-4-iodoacetanilide; α-(4-chlorophenoxy)-3-nitroacetanilide; α-(4-chlorophenoxy)-p-acetotoluidide; α-(4-chlorophenoxy)-N-p-xenylacetamide; γ-(4-chlorophenoxy)butyronitrile; 4-chlorophenyl (4-chlorophenoxy)acetate; 1-(4-chlorophenyl)-3-(2-chlorophenyl) urea; 4-chlorophenyl (2,4-dichlorophenoxy)acetate; 1-(3-chlorophenyl)-3,3-(cyclopentamethylene)urea; 1-(3-chlorophenyl-3-phenylurea; S-(4-chlorophenyl)-2-bromothioglycolanilide; S-(4-chlorophenyl)-3-bromothioglycolanilide; 4-chlorophenyl (2,4,5-trichlorophenoxy)acetate; 2,6-dibromobenzoquinone-4-chloroimide; 2,4-dichlorobenzylsulfonyl chloride; 1,3-bis(4-chlorophenoxyacetamido)benzene; 1,4-isomer; 4,4'-bis(4-chlorophenoxyacetamido)biphenyl; 2,4-bis(4-chlorophenoxyacetamido)toluene; α-(2,4-dichlorophenoxy)acetanilide; α-(2,4-dichlorophenoxy)-N-(2-aminoethyl) **acetamide**; α-(2,4-dichlorophenoxy)-p-acetanisidide; α-(2,4-dichlorophenoxy-2,5-dichloroacetanilide; α-(2,4-dichlorophenoxy)-2,4-dimethylacetanilide; 1-(2,4-dichlorophenoxyacetyl)-2-(2,4-dinitrophenyl)hydrazine; (2,4-dichlorophenoxy)acetic hydrazide; α-(2,4-dichlorophenoxy)aceto-2-naphthalide; α-(2,4-dichlorophenoxy)-p-acetotoluidide; α-(2,4-dichlorophenoxy)-N-o-xenylacetamide; 4-(2,4-dichlorophenoxyacetamido)azobenzene; (2,4-dichlorophenoxy)acetylaminoguanidine; (2,4-dichlorophenoxy)acetyl bromide; α-(2,4-dichlorophenoxy)-N-(**hydroxy**-tert-butyl) **acetamide**; S-(2,4-dichlorophenoxyacetyl)isothiourea; 1-(2,4-dichlorophenoxyacetyl)-2-methyl-2-thioisourea; γ-(2,4-dichlorophenoxy)butyric acid; γ,-(2,4-dichlorophenoxy)butyronitrile; 2,4-dichlorophenyl (4-chlorophenoxy)acetate; 2,4-dichlorophenyl (2,4-dichlorophenoxy)acetate; 1-(2,5-dichlorophenyl)-3-phenylurea; S-(2,5-dichlorophenyl)thioglycolamide; 4,4'-bis(2,4-dichlorophenoxyacetamido)biphenyl; 1,4-bis (2,4-dimethylphenoxyacetamido)benzene; 2,4-bis(2,4-dimethylphenoxyacetamido)toluene; 2,4-dichlorophenyl (2,4,5-trichlorophenoxy)acetate; 2,4-dichlorophenyl (4-chlorophenoxy)acetate; 2,3-dichloropropyl (2,4-dibromophenoxy)acetate; 2,3-dichloropropyl (2,4-dichlorophenoxy)acetate; 2-diethylaminoethyl 2,3,5-triiodobenzoate; 3,3'-dimethyl-4,4'-bis(4-chlorophenoxyacetamido)biphenyl; 3,3'-dimethyl-4,4'-bis(2-methylphenoxyacetamido)biphenyl; 1,3-bis(2-methylphenoxyacetamido)benzene; 1,4-isomer; 4,4'-bis(2-methylphenoxyacetamido)biphenyl; 4,4'-bis(2,4-dimethylphenoxyacetamido)biphenyl; 1-(4-ethoxyphenyl)-3-phenylurea; Et 2-bromo-3,5-dichlorobenzoate; Et (4-bromophenoxy)acetate; Et (4-chlorophenoxy)acetate; 2-ethylhexyl (2,4-dichlorophenoxy)acetate; methallyl (4-chlorophenoxy)acetate; 2-methoxy-4-methylphenyl 1-naphthalenecarbamate; Me 2-bromo-3-nitrobenzoate; 4-(2-methyl-4-chlorophenoxyacetamido)azobenzene; α-(2-methyl-6-chlorophenoxy)-2,5-dichloroacetanilide; 2-methyl-4-chlorophenyl (2,4-dichlorophenoxy)acetate; 1-methyl-2,4-bis(2,4-dichlorophenoxyacetamido)benzene; Me 4-nitrophenylcarbamate; Me (2,4,5-trichlorophenoxy)acetate; (2-**hydroxy**-1-naphthyl)-1-piperidylphenylmethane; 2-nitrobutyl (2,4,5-trichlorophenoxy)acetate; 4-nitro-N,N-dimethylaniline; octyl (2,4-dichlorophenoxy)acetate; pentachlorophenyl (2,4,5-trichlorophenoxy)acetate; 1-phenyl-3,3-cyclopentamethyleneurea; Ph phenylcarbamate; Ph (2,4,5-trichlorophenoxy)acetate; iso-Pr (2,4-dichlorophenoxy)acetate; 3-isopropoxy-2-naphthoic acid; 1,3-di-m-tolyl-urea; (2,4,5-tribromo-3,5-dimethylphenoxy)acetic acid; 2,4,6-tribromophenyl acetate; 2,4,5-trichlorobenzamide; trichloroethyl (2,4-dibromophenoxy)acetate; 2,2,2-trichloroethyl (2,4-dichlorophenoxy)acetate; 2,4,5-trichlorophenoxyacetic acid; 2-(2,4,5-trichlorophenoxyacetamido)anthraquinone; α-(2,4,5-trichlorophenoxy)-4-bromoacetanilide; α-(2,4,5-trichlorophenoxy)-4-

methoxyacetanilide; (2,4,5-trichlorophenoxy)aceto-2-naphthalide; α-(2,4,6-trichlorophenoxy)-4-sulfoacetonaphthalide; α-(2,4,5-trichlorophenoxy)-m-acetotoluidide; (2,4,5-trichlorophenoxy)acetyl chloride; 1-(2,4,5-trichlorophenoxyacetyl)-2-(p-nitrophenyl)hydrazine; 2,4,6-trichlorophenyl (4-chlorophenoxy)acetate; 2,4,6-trichlorophenyl (2,4-dichlorophenoxy)acetate; 2,4,6-trichlorophenyl (2,4,5-trichlorophenoxy)acetate; N-[3-(trifluoromethyl)phenyl]-α-(4-chlorophenoxy)**acetamide**; N-[3-(trifluoromethyl)phenyl]-α-(2,4,5-trichlorophenoxy)**acetamide**; 2,3,5-triiodobenzoic acid; 2,3,5-triiodobenzoyl chloride; 1-[tris(hydroxymethyl)methylamino]-2,4-dinitrobenzene; N-(p-xenyl)-α-(2,4-dichlorophenoxy) **acetamide**

.

The following, as Group IV-C, were also examined by the three tests and showed relatively low activity as compared with I: 2-acetoxyethyl 1-naphthalenecarbamate; 2-acetoxyethyl phenylcarbamate; (2-acetyl-4-chlorophenoxy)acetic acid; (2-allyl-4-chlorophenoxy)acetic acid; allyl 1-naphthalenecarbamate; allyl phenylcarbamate; allyl 4-tolyl sulfone; 1-aminoanthraquinone; 2-isomer; 4-aminobenzyl tris(hydroxymethyl)methylamine-di-HCl; 2-amino-3,5-dichlorobenzoic acid; 2-aminoethylsulfuric acid; 8-amino-1-naphthol-3,6-disulfonic acid; 1-amino-2-naphthol-4-sulfonic acid; 4-aminophenol; (2-aminophenoxy)acetic acid; (4-aminophenyl)acetic acid; 2-aminopyridine; 2-aminothiazole; 2-amylaminoethyl 4-butoxybenzoate-HCl; isoamyl formate; amyl (2-methylphenoxy)acetate; isoamyl 1-naphthalenecarbamate; 4-tert-amylphenol; amyl phenylcarbamate; isoamyl phenylcarbamate; (4-arsonophenoxy)acetic acid; benzoic acid; 4-benzylaminophenol-HCl; benzyl Bu sulfone; allyl (benzylsulfonyl)acetate; Me (benzylsulfonyl)acetate; N-benzyl-N,N'-bis[tris(hydroxymethyl)methyl]-2-**hydroxy**-1,3-diaminopropane; benzyl Et sulfone; benzyl Me sulfone; benzyl 4-tolyl sulfone; benzyl[tris(hydroxymethyl)methyl]amine; 1,3-bis{[tris(hydroxymethyl)methyl]amino}-2-propanol-HCl; 2-bromobenzamide; 2-bromobenzanilide; 2-bromo-2',4'-dichlorobenzanilide; 2-bromobenzoic acid; 3-isomer; NH4 4-bromobenzoate; 4-bromobenzonitrile; (2-bromo-4-tert-butylphenoxy)acetic acid; 2-bromo-3,5-dichloro-N-butylbenzamide; 2-bromo-3,4',5-trichlorobenzanilide; 2-bromoethylamine; 2-bromoethyl 4-ethoxythiolbenzoate; 2-bromoethyl (2-methyl-4-chlorophenoxy)acetate; 2-bromo-4-nitrobenzoic acid; 2-bromo-5-nitrobenzoic acid; NH4 2-bromo-5-nitrobenzoate; 3-bromo-4-nitrobenzoic acid; 3-bromo-5-nitrobenzoic acid; 4-bromophenol; (2-bromophenoxy)acetic acid; α-(4-bromophenoxy)-4-bromoacetanilide; α-(4-bromophenoxy)-4-chloroacetanilide; α-(4-bromophenoxy)-2,5-dichloroacetanilide; 3-bromophenylammonium fluoroborate; 4-bromophenylammonium fluoroborate; 1-(2-bromophenyl)-3-(2-chlorophenyl)urea; 1-(4-bromophenyl)-3-(3-chlorophenyl)urea; 1-(2-bromophenyl)-3-(3-chlorophenyl)urea; N-(4-bromophenyl)-3-(2-chlorophenyl)urea; NH4 (4-bromophenyl)dithiocarbamate; 4-bromophenyl 1-naphthalenecarbamate; (2-bromo-4-phenylphenoxy)acetic acid; 4-bromophenyl phenylcarbamate; 1-(2-bromophenyl)-3-phenylurea; 1-(3-bromophenyl)-3-phenylurea; 1-(4-bromophenyl)-3-phenylurea; 3-bromophenylsulfamic acid; N-(3-bromophenyl) α,α,α-trichloroacetamide; 2-butylaminoethyl 2-butoxybenzoate-HCl; 2-butylaminoethyl diphenylacetate-HCl; 2-butylaminoethyl 4-(heptyloxy)benzoate-HCl; 2-butylaminoethyl 4-propoxybenzoate-HCl; 2-butylaminoethyl 2-(thiobutoxy)benzoate; (2-sec-butyl-4-chlorophenoxy)acetic acid; Hg butyldithiocarbamate; Bu 1-naphthalenecarbamate; iso-Bu 1-naphthalenecarbamate; 4-tert-butylphenol; Bu phenylcarbamate; iso-Bu phenylcarbamate; tert-Bu phenylcarbamate; 1-butyl-3-phenylthiourea; N-butyl-α-(2,4,5-trichlorophenoxy) **acetamide**; 4-carbethoxy-6-methoxyquinoline; 1-carbethoxy-3-phenylurea; 1-carbobutoxyethyl 1-naphthalenecarbamate; 1-carboisopropoxyethyl 1-naphthalenecarbamate; O-(2-carboxymethoxybenzoyl)glycolic acid; O-(2-carboxymethoxy-3-methyl-5-chlorobenzoyl)glycolic acid; NH4

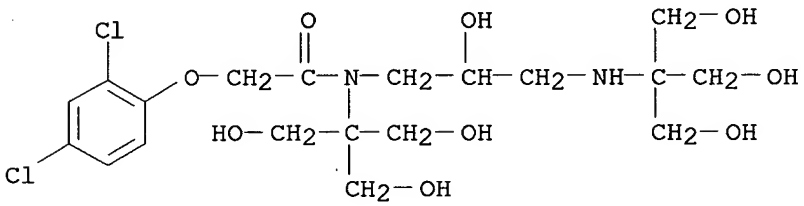
(carboxymethyl)dithiocarbamate; Na (4-carboxymethylphenyl)dithiocarbamate; 2-carboxy-6-methylphenyl phenylcarbamate; NH4 (4-carboxyphenyl)dithiocarbamate; 4-carboxyphenylglycine; o-carboxyphenyl 1-naphthalenecarbamate; 1-(4-carboxyphenyl)-3-(1-naphthyl)urea; 4-carboxyphenyl phenylcarbamate; S-(4-carboxyphenyl)thioglycolic acid; N4-(β-carboxypropionyl)sulfanilamide; pyrocatechol; chloroacetyl chloride; 4-chloroanisole; 2-chlorobenzaldehyde O-carboxymethyloxime; 2-chlorobenzaldehyde oxime; 4-chlorobenzamide; 4-chlorobenzenesulfonamide; 4-chlorobenzoic acid; bis(4-chlorobenzyl)disulfide; S-(4-chlorobenzyl)thioglycolic acid; bis(4-chlorobenzyl)sulfide; (4-chlorobenzylsulfonyl)acetic acid; 4-chlorocinnamic acid; highly chlorinated 1,5-dihydroxynaphthalene; 2-chloroethyl (2-propyl-4-chlorophenoxy)acetate; chlorohydroquinone; chlorohydroquinone-O,O-diacetic acid; 4-(chloromercuri)phenol; [4-(chloromercuri)phenoxy]acetic acid; [2-(chloromethyl)-4-chlorophenoxy]acetic acid; 2-chloro-4-methyl-6-methoxyquinoline; 2-chloro-4-methylquinoline; (7-chloro-1-naphthoxy)acetic acid; 1-chloronaphthylacetic acid mixture; 4-chlorophenetole; 1-(4-chlorophenoxyacetamido)naphthalene; 2-(4-chlorophenoxyacetamido)naphthalene; α-(4-chlorophenoxy)-2,5-dichloroacetanilide; α-(4-chlorophenoxy)-N,N-diethyl-**acetamide**; (4-chlorophenoxy)acetic piperidide; α-(4-chlorophenoxy)-2-nitroacetanilide; α-(4-chlorophenoxy)-2,4,6-trichloroacetanilide; (4-chlorophenoxy)(4-chlorophenyl)acetic acid; (4-chlorophenoxy)fumaric acid; 2-(4-chlorophenoxy)heptanoic acid; β-(4-chlorophenoxy)propionic acid; β-(4-chlorophenoxy)propionitrile; 4-chlorophenylammonium fluoroborate; 1-(2-chlorophenyl)-3-butylurea; 1-(3-chlorophenyl)-3-butylurea; 1-(2-chlorophenyl)-1-(4-carboxyphenyl)urea; N-(3-chlorophenyl)-α-chloroacetamide; 4-isomer; 1-(3-chlorophenyl)-3-(2-chlorophenyl) urea; 1-(4-chlorophenyl)-3-(3-chlorophenyl) urea; 3-(2-chlorophenyl)-1,1-cyclopentamethyleneurea; NH4 (4-chlorophenyl)dithiocarbamate; 2-chloro-1,4-phenylene bis(phenylcarbamate); N-(2-chlorophenyl)glycine; 1-(2-chlorophenyl)-3-(2-hydroxyethyl) urea; 3-chloro isomer; 3-chlorophenyl isocyanate; 1-(2-chlorophenyl)-3-(1-naphthyl) urea; 4-isomer; [2-(4-chlorophenyl)phenoxy]acetic acid; 1-(2-chlorophenyl)-3-phenylurea; 4-chloro isomer; 1-(2-chlorophenyl)-3-phenylthiourea; 3-isomer; 4-isomer; Na (3-chlorophenyl)sulfamate; (4-chlorophenyl)sulfamic acid; S-(2-chlorophenyl)thioglycolic acid; S-(4-chlorophenyl)thioglycolamide; S-(4-chlorophenyl)thioglycolanilide; S-(4-chlorophenyl)-4'-bromothioglycolanilide; S-(4-chlorophenyl)thioglycol-p-phenetidide; S-(4-chlorophenyl)thioglycol-m-toluidine; 1-(2-chlorophenyl)urea; 3-isomer; 1,3-bis(2-chlorophenyl)urea; 3-isomer; cinnamic acid; cinnamoyl chloride; o-cresol; m-isomer; p-isomer; 4-toloxyacetyl chloride; cyanoacetamide; (2-cyclohexyl-4-chlorophenoxy)acetic acid; (decyl-mercapto)acetic acid; (decylsulfonyl)acetic acid; bis(2-acetoxyethyl) sulfone; 2,6-diaminopyridine monohydrochloride; 2,6-dibromo-4-carboxyphenyl phenylcarbamate; α,β-dibromodihydrocinnamic acid; 4,6-dibromo-1,3-dihydroxybenzene; (2,6-dibromo-4-methylphenoxy)acetic acid; 2,4-dibromophenyl phenylcarbamate; α, β-dibromo-γ-phenylpropionamide; bis(2-butyroxyethyl) sulfone; 2,5-dichloro-4-aminobenzenesulfonic acid; 2,4-dichloroanisole; 2,6-dichlorobenzenoneindophenol sodium salt; 2,5-dichlorobenzenesulfonamide; 2,5-dichlorobenzenesulfonyl chloride; (2,4-dichlorobenzylmercapto)acetic acid; bis(2,4-dichlorobenzyl)disulfide; 2,4-dichlorobenzyl mercaptan; bis(2,4-dichlorobenzyl)sulfide; bis(2,4-dichlorobenzyl)sulfone; 5,7-dichloro-3-coumaranone; N,2,4-trichloroacetanilide; 2,6-dichloro-3-ethyl-4-methylpyridine; 2,4-dichloromandelic acid; 2,6-dichloro-4-methyl-5-ethylnicotinamide; (2,6-dichloro-4-methylphenoxy)acetic acid; (2,4-dichloro-6-methylphenoxy)acetyl chloride; (2,4-dichloro-1-naphthoxy)acetic acid; 2,4-dichlorophenetole; 2,4-dichlorophenol; 1-(2,4-dichlorophenoxyacetamido)anthraquinone;

2-(2,4-dichlorophenoxyacetamido)anthraquinone; (2,6-dichlorophenoxy)acetic acid; 3,5-isomer; α-(2,4-dichlorophenoxy)-4-bromoanilide; α-(2,4-dichlorophenoxy)-4-chloroacetanilide; α-(2,4-dichlorophenoxy)-p-acetophenetide; α-(2,4-dichlorophenoxy)-N-(2-hydroxyethyl)**acetamide**; 2,4-dichlorophenoxyaceto-1-naphthalide; α-(2,4-dichlorophenoxy)-2-nitroacetanilide; α-(2,4-dichlorophenoxy)-3-nitroacetanilide; 1-(2,4-dichlorophenoxyacetyl)-2-(p-nitrophenyl)hydrazine; α-(2,4-dichlorophenoxy)-N-2'-pyridylacetamide; α-(2,4-dichlorophenoxy)-2,4,6-trichloroacetanilide; 2-(2,4-dichlorophenoxyacetamido)-6,8-naphthalenedisulfonic acid; 1-(2,4-dichlorophenoxyacetyl)-1-phenylsemicarbazide; (2,4-dichlorophenoxy)(p-chlorophenyl)acetic acid; 1-(2,4-dichlorophenoxy)-2,3-epoxypropane; (2,4-dichlorophenoxy) fumaric acid; Addnl. information in printed abstract

IT **724440-96-4, Acetamide,** 2-(2,4-dichlorophenoxy)-N-[2-**hydroxy**-1,1-bis(hydroxymethyl)ethyl]-N-[2-**hydroxy**-3-[[2-**hydroxy**-1,1-bis(hydroxymethyl)ethyl]amino]propyl]-
(growth inhibition of plants by)

RN 724440-96-4 CAPLUS

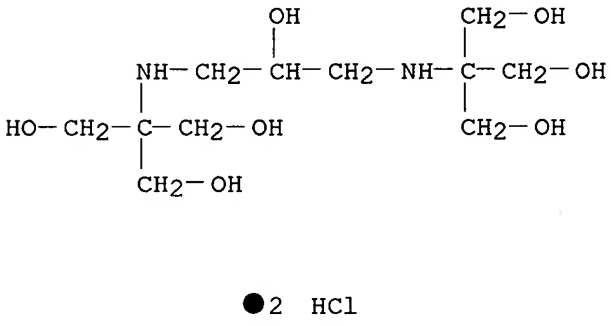
CN Acetamide, 2-(2,4-dichlorophenoxy)-N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-N-{2-hydroxy-3-{[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]amino}propyl}- (5CI) (CA INDEX NAME)



IT **7145-91-7,** 1,3-Propanediol, 2,2'-[(2-hydroxytrimethylene)diimino]bis[2-(hydroxymethyl)-, dihydrochloride
(preparation of)

RN 7145-91-7 CAPLUS

CN 1,3-Propanediol, 2,2'-[(2-hydroxytrimethylene)diimino]bis[2-(hydroxymethyl)-, dihydrochloride (8CI) (CA INDEX NAME)



=>